**EPA REGISTRATION NUMBER 42750-108** 



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

3-30-06

Morris Gaskins Albaugh, Inc. P.O. Box 2275 Valdosta, GA 31604

Subject: EPA Registration Number 42750-108/ACETOCHLOR 3.1 + ATZ 2.5

Dear Mr. Gaskins:

The alternate CSF, dated 2/27/2006, is acceptable. If you have any questions please call Erik Kraft at 703-308-9358.

Sincerely,

Vames A. Tompkins Product Manager 25

Herbicide Branch

Registration Division (7505C)

<b>ŞEPA</b>	United States Environmental Protection Agency Washington, DC 20460			1	Registra		OPP Identifier Number	
	Application for Pesticide -			0 1	Other			
		Applicati			1	-		
1. Company/Product Num 42750-108	ber		J. Tompk	duct Manager ins		3. Pr	None Restricted	
4. Company/Product (Name) ACETOCHLOR 3.1 + ATZ 2.5			PM# 25	11.71.77				
5. Name and Address of A Albaugh Inc. P.O. Box 2127 Valdosta, GA 3160		Code)	(b)(i), my i to:	. No.	nilar or identi		FIFRA Section 3(c)(3) emposition and labeling	
			Section - II					
Resubmission in re  Notification - Expla  Explanation: Use addit Submission of alternate C	sponse to Agency letter in below. ional page(s) if necess	ary. (For section	on I and Section II.)	nal printed labe gency letter da Me Too" Applic ther - Explain b	ted ation.	to		
			Section - III				+	
1. Material This Product V			Water Calable Bank		12 Ton 16	01-1		
Child-Resistent Packaging Yes No	Unit Packaging  Yes  ✓ No		Water Soluble Pack Yes No	aging	2. Type of Container  Metal Plastic Glass			
ertification must submitted	If "Yes" Unit Packaging wg	No. per it. container	If "Yes" Package wgt	Paper Other (Specify)				
3. Location of Net Conten	ts Information Container	4. Size(s) Ro	2.5 gl, bulk	5. Lc	On label		to container	
6. Manner in Which Label	is Affixed to Product	✓ Litho Pape Sten	graph r glued ciled	Other				
			Section - IV					
1. Contact Point   Comple	te items directly below	for identificati	on of individual to be co	ntected, if nec	essary, to pro	cess this	application.)	
Name Morris Gaskins			Title Registrations Manager			Telephone No. (Include Area Code) 229-244-3288		
	any knowlingly false o		ation d all attachments theret atement may be punish				8. Date Application Received (Stamped)	
2. Signature  Mas As			3. Title Registrations Manager				•••••	
Typed Name Morris Gaskins			5. Date 2/27/06				·::":	

CORPORATE OFFICE 1525 NE 36th Street Ankeny, IA 50021 515.964.9444 (Phone) 800.247.8013 (Toll Free) 515.964.7813 (FAX)

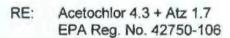
# ALBAUGH, INC.

ALBAUGH, INC. — VALDOSTA 304 Janet Street, Suite H Valdosta, Georgia 31502 229.244.3288 (Direct Diel) 229.244.5841 (FAX)

## FEDERAL EXPRESS

February 27, 2006

Mr. Jim Tompkins (PM 25)
Office of Pesticide Programs
Registration Division
U.S. Environmental Protection Agency
Crystal Mall 2, Room 266A
1801 S. Bell Street
Arlington, VA 22202



Acetochlor 3.1 + Atz 2.5 EPA Reg. No. 42750-108

Acetochlor 7.0 EC EPA Reg. No. 42750-101

Dear Mr. Tompkins,

The enclosed submission for the above referenced registrations are proposed alternate CSFs to allow use of Albaugh's recently registered Acetochlor TGAI as an alternate to the basic source.

Please call if you have any questions.

700 /des

Regards,

Morris Gaskins Registrations Manager Albaugh, Inc.

229-244-3288





G.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (N7505C) 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

NOTICE OF PESTICIDE:

x Registration

Reregistration

(under FIFRA, as amended)

EPA Reg. Number:

42750-108 Date of Issuance:

12/22/05

Term of Issuance:

Conditional

Name of Pesticide Product:

ACETOCHLOR 3.1 + ATZ 2.5

Name and Address of Registrant (include ZIP Code):

Albaugh, Inc. P.O.Box 2127 Valdosta, GA 31604-2127

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named posticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a posticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec.3(c)(7)(A) provided that you:

- 1. Submit the results of a one year storage stability study (860.6137) and corrosion characteristics study (830.6320) when they are available or within 24 months of the date of this letter.
- 2. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires registrants of similar products to submit such data.
- 3. Make the labeling changes listed below before you release the product for shipment
  - A. Add the phrase EPA Registration No.42750-108.
  - B. Make sure the type size for the signal word "CAUTION" complies with the regulations.

Signature of Approving Official

Date:

December 22, 2005

EPA Form \$570-6

#3 (continued)

C. In the Personal Protective Equipment (PPE) section

Change the glove statement to read "Chemical resistant gloves made of any waterproof material 10 mils or thicker"

Change "If no such instructions for washables, use detergent and hot water" to "If no such instructions for washables exist, use detergent and hot water"

- D. Under "Engineering Controls" modify "1.40 CFR 170.240(4)(4-6) 1", to read "40 CFR 170.240(4-6)
- E. Under "Environmental Hazard" change "neigh-boring" to "neighboring" and add "or rinsate" to "Do not contaminate water when disposing of equipment wash waters or rinsate.
- F. Under Directions for Use change "This is an end use product. Monsanto does not intend .......
  To "This is an end use product. Albaugh does not intend ........"
- G. In the Agricultural Use Requirements box change the glove statement to read "Chemical resistant gloves made of any waterproof material 10 mils or thicker"
- H. Under "Storage and Disposal" "Instructions for Users and Refillers" provide contact information for Albaugh Customer Service. Change "Cleaning is not necessary prior to compliance with state and local recommendations" to "Cleaning is not necessary prior to refilling with this product. Clean containers before final disposal. Disposal of this container must be in compliance with state and local regulations"
- I Page 5 change con-tact to contact, page 12 change broad-cast to broadcast and pre-sent to present.
- J. Page 10 under "Application Systems" "Ground Band Treatment" in the second formula change "Broadcast Rate per acre" to Broadcast Volume per acre" to give "Band Volume per acre"

Under "Application with dry bulk fertilizer first paragraph change "Monsanto" to "Albaugh"

- K. Page 11 "If the dry fertilizer used has inadequate absorptive capacity, use a higher absorptive material such as Agsorb<sup>TM</sup>, MP-79<sup>TM</sup>, or Micro-cel<sup>TM</sup> (remove "E" unless intended) ... change "Monsanto" to "Albaugh" in "Contact Monsanto Company for specific guidance."
- L. Page 15 change Side spinosa to Sida spinosa. The footnotes to which the "\*" and "\*\*" refer under Annual Broadleaves controlled are missing. Change Enochloa villosa to Eriochloa villosa.
- M. Page 16 Note in the middle of the page did you intend "Harness herbicide" to be here? After the atrazine rates given in quarts in this note add the pounds of active ingredient that these rates are equivalent. In table at bottom of page in the column for Atrazine after (quarts) add pounds a.i. per quart.
- N. Page 20 "Sequential application" Application of this product following Princep (see section 12.11)
- O. Page 23 Middle of the page in table "Coarse" To what does the "\*" refer ?
- P. Page 25 Table at top of page 3% or more Organic Matter chang "2.3 to 13.0" to "2.3 to 3.0"

page 3 of 3 ACETOCHLOR 3.1 + ATZ 2.5 Albaugh, Inc. EPA Reg. 42750-108

- 4. Submit three (3) copies of the final printed label for this product to the Agency prior to releasing this product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accoprdance with FIFRA section 6(e). Your release for shipment of this product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Jim Tompkins, Product Manager 25 Herbicide Branch Registration Division

## RESTRICTED USE PESTICIDE

due to ground and surface water concerns and oncogenicity concerns. For retail sale to and use only by Certified Applicators, or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

## ACETOCHLOR 3.1 + ATZ 2.5

Preemergence herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn and Popcorn.

#### **ACTIVE INGREDIENTS:\***

Acetochlor, 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide	33.4%
Atrazine, 2-chloro-4-(ethylamino)-6-(isopropylamino) s-triazine and related triazines	
OTHER INGREDIENTS:	39.7%
TOTAL:	00.0%

\*Contains 372 grams/litre or 3.1 pounds/gallon of acetochlor and 300 grams/liter or 2.5 pounds/gallon of atrazine and related compounds.

## CAUTION

#### KEEP OUT OF REACH OF CHILDREN

FIRST AID
<ul> <li>Hold eye open and rinse slowly ant gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<ul> <li>Take off contaminated clothing</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control center or doctor for treatment advice.</li> <li>Sensitized persons should avoid further contact and reuse of contaminated clothing.</li> </ul>
<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice</li> </ul>

In case of an emergency involving this product, call CHEMTREC at 1-800-424-9300

EPA Reg. No. 42750-appl

**NET CONTENTS:** 

EPA Est. No. 42750-MO-001

MANUFACTURED BY: Albaugh, Inc. Ankeny, IA 50021 ACCEPTED with COMMENTS in EPA Letter Dated.

Under the Federal Insecticide, Fungicide, and Rodenficide Ast as amended, for the pesticide registered under EPA Reg. No.

42750-108

## PRECAUTIONARY STATEMENTS

## Hazards to Humans and Domestic Animals

CAUTIONI HARMFUL IF SWALLOWED OR INHALED. CAUSES EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Mixers, Loaders, Applicators and other handlers must wear:

- 1. Long-sleeved shirt and long pants
- Chemical resistant gloves made of such as polyethylene or polyvinyl chloride,
- 3. Shoes plus socks,
- Chemical-resistant apron when mixing/loading, cleaning up spills, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 1.40 CFR 170.240(4)(4-6)1, the handler PPE requirements may be reduced or modified as specified in the WPS.

## USER SAFETY RECOMMENDATIONS

#### USERS SHOULD:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## **ENVIRONMENTAL HAZARDS**

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e. well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas maybe hazardous to aquatic organisms in neigh-boring areas. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

See Use restrictions and Tile-Terraced Fields sections for additional specific information.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Read the entire label before using this product. Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be assessed through <a href="https://www.atrazine-watershed.info">www.atrazine-watershed.info</a> or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Albaugh, Inc. for a refund.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, are:

- 1. Coveralls
- 2. Chemical resistant gloves such as any waterproof material
- Shoes plus socks.

## STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Keep container closed to prevent spills or contamination.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that can-not be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

CONTAINER DISPOSAL: Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. (See the individual container label for disposal information.)

[alternate language for refillable/mini bulk or bulk containers]

Instructions for Users: When the container is empty, replace the cap and seal all openings that have been made during usage, and return the container to the point of purchase, or to an alternate location designated by the registrant at the time of purchase of this product. If not returned to the point of purchase or a designated location, triple rinse or pressure wash the empty container and offer it for recycling if available. If not refilled or recycled, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Instructions for Users and Refillers: This container may be refilled only with this pesticide product. Do not reuse this container for any other purpose. Do not transport if this container is damaged or leaking. If the container is damaged or leaking or obsolete, or to obtain information about recycling refillable containers, contact Albaugh Customer Service. Cleaning is not necessary prior to compliance with state and local recommendations.

[alternate language for plastic 1-way containers]

Do not reuse container. Triple rinse container, then puncture and dispose of in sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[alternate language for drums]

Do not reuse container. Return container per the Albaugh container return program. If not returned, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### GENERAL INFORMATION

This product is recommended for control of yellow nutsedge and many annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. This product alone will not control emerged seedlings. This product may be applied either as a surface application before or after planting or after crop emergence. This product may also be shallowly incorporated prior to planting to blend the herbicide treatment into the upper 1 to 2 inches of soil. Except for minimum or conservation tillage systems, the seedbed should be fine, firm and free of clods and trash.

Read and carefully observe cautionary statements and all other information appearing on the labeling of all products used in mixtures and sequential treatments. Refer to the product labels of herbicides used in tank mixtures with this product to determine the weeds controlled by those products.

NOTE: Use this product for weed control in corn only. CORN (ALL TYPES INCLUDING SWEET CORN), MILO (SORGHUM), OR SOYBEANS CAN BE PLANTED THE YEAR FOLLOWING THE USE OF THIS PRODUCT IF SOYBEANS OR OTHER NONLABELED CROPS ARE TO BE PLANTED THE FOLLOWING YEAR, THERE IS THE POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE.

#### USE RESTRICTIONS

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination. Do not apply to the following soils where depth to ground water is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter: or sandy loans with less than 1 percent organic matter.

This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied within 66 feet of all points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or set-back from runoff points must be planted to a crop or seeded with grass, or other suitable crop.

This product may not be mixed or loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110 percent of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from con-tact with the pad shall have a minimum containment capacity of 100 percent of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

Do not flood irrigate to apply or incorporate this product.

Product must be used in a manner which will prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Do not apply this product through any type of irrigation system.

Disposal of excess pesticide, spray mixtures or rinsate should be according to label use instructions or according to the state Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional office.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:

Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or

snow covered soils.

Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rain-fall has occurred between application and the first irrigation.

Do not apply this product using aerial application equipment.

Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:

Use low pressure application equipment capable of producing a large droplet spray. Do not use nozzles that produce a fine droplet spray. Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.

Keep ground driven spray boom as low as possible above the target surface.

Make application when the wind velocity favors on-target product deposition (approximately 3-10 miles per hour). Do not apply when wind velocity exceeds 15 miles per hour. Avoid application when gusts approach 15 miles per hour.

Low humidity arid high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

Use of this product not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

For field corn forage use, allow 60-day preharvest interval.

Flush sprayer with clean water after use.

When tank mixing or sequentially applying, atrazine or products containing atrazine to corn, the total pounds atrazine applied (pounds active ingredient per acre) must not exceed 2.5 pounds active ingredient per acre.

Tile-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options must be used:

1. Do not apply this product within 66 feet of standpipes in the tile-outletted fields.

Apply this product to the entire tile-outletted field and immediately incorporate it to a depth of 2 to 3 inches in the entire tile-outletted field.

Apply this product to the entire tile-outletted field under a no-till practice only when a high crop residue
management practice is used. High crop residue management practice is described as a crop
management practice where little or no crop residue is removed from the field during or after crop
harvest.

#### SOIL TEXTURE

Applicators should evaluate soil conditions carefully to assure that they choose the correct label rate.

The recommended use rates of this product and the other herbicides labeled for use in tank mixtures with this product vary with soil texture. Unless soil texture is specifically named, rate tables through-out this label refer to only three soil textural groups: coarse, medium and fine. The following is a complete listing of soil

textures included in each of these three soil textural groups:

SOIL TEXTURAL GROUP	SOIL TEXTURE
COARSE	sand, loamy sand, sandy loam
MEDIUM	loam, silt loam, silt, sandy clay loam
FINE	Silty clay loam, clay loam, sandy clay, silty clay, clay

Refer to the above table to determine the corresponding soil textural group for the soil to be treated.

## MIXING, SPRAYING AND HANDLING INSTRUCTIONS

NOTE: Direct contact or exposure to this product or spray mixtures of this product should be minimized. The following instructions for transfer, mixing cleaning or repairing equipment should be followed in order to minimize this exposure. Review the protective clothing requirements as listed in the "PRECAUTIONARY STATEMENTS" section of this label (front panel) and do not use this product until you have the necessary protective clothing.

#### 2.5 Gallon Containers

Open pouring from these containers can result in exposure from splashing or spitling. Special care in lifting and pouring are strongly recommended.

#### **Bulk Containers**

Open pouring from these containers can result in exposure from splashing or spilling and is not recommended. This product should be transferred from these containers to the mix or spray tank using pumps or transfer probes. The probe or pump should not be removed from the container or disconnected until the container is emptied and rinsed. Use the pump or probe system to rinse the empty container and transfer the rinsate directly to the mix or spray tank.

## Equipment Cleaning and Repair

Cleaning and repair of transfer systems and application equipment is a source of exposure to this product. Care should be taken to minimize exposure during cleaning and repair of transfer systems and application equipment. Whenever possible, these systems or equipment should be rinsed before being cleaned or repaired.

When repairs must be made during transfer or application, the equipment should be shut down, and special care taken to avoid contact with the pesticide.

#### Sprayer Compatibility

Always predetermine the compatibility of this product or labeled tank mixtures of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the "STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST" section in this label to determine the compatibility of this product and the labeled tank mixtures recommended for use with sprayable fluid fertilizer carrier.

Mix this product or labeled tank mixture of this product with the appropriate carrier as follows:

- 1. Place a 20 to 35 mesh screen or wetting basket over filling port.
- 2. Through the screen, fill the sprayer tank one-half full with the appropriate carrier.
- 3. If a compatibility agent is necessary to improve mixing or to prevent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only

compatibility agents cleared by FDA for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent label. Check for adequate agitation.

4. If a wettable powder or dry flowable formulation is used, make a slurry with water and add it slowly

through the screen into the tank. Continue agitation.

If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when flow-able is pre-mixed one part flowable with one part water and added to the tank in diluted form.

6. Add this product slowly through the screen into the tank. Mixing and compatibility maybe improved when

this product is prediluted with two parts of water and added to the tank in diluted form.

Complete filling the sprayer tank with carrier. If a Roundup" agricultural herbicide or Gramoxone" Extra
is used, add the required amount near the end of the filling process. Remove hose from tank immediately
after filling to avoid siphoning back into the carrier source.

Maintain good agitation at all times until the contents of the tank are sprayed.

NOTE: If spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. Check for even distribution of spray droplets. To reduce loss of the chemical due to drift of a fine mist, apply at nozzle pressures below 40 psi.

#### STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

Herbicides may not always mix evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This may be due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential. The test follows:

## A. Materials Required For a Compatibility Test

1. Two one-quart jars with lid or stopper (marked "with" and "with-out").

2. TEAspoons (for a more exacting test, a five to ten milliliter (ml.) pipette or graduated cylinder is desirable).

Sprayable fluid fertilizer to be tested.

The herbicide chemicals to be mixed.

A compatibility agent (the purpose of the adjuvant is to help keep the fertilizer and crop protection chemical in suspension, if this assistance is needed).

#### B. Procedure

1. Add one pint of the sprayable fluid fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".

	int Liquid Fertilizer o Quart Jars.
WITH	WITHOUT

2. To the jar marked "with", add 1/4 TEAspoon or 1.2 milliliters of a suitable compatibility agent; shake gently for five to ten seconds to mix. (1/4 Teaspoon in one pint is the equivalent of two pints per 100 gallons of liquid fertilizer.)

	marked "With"
	mpatibility Agent Shake to Mix
WITH	WITHOUT

3. To each jar add the appropriate amount of herbicide(s). If more than one is used, add them separately with the wettable powders or dry flowables added first, flowables second and liquid last. Shake gently five to ten seconds after each addition.

	s) To Both Jars ke to Mix.
WITH	WITHOUT

			Amount to Be Added Per Pint of Sprayable Fluid Fertilizer (Assuming Volume is 25 gal/A)
HERBICIDE	RATE/Acre		Level TEAspoons
Wettable Powders	1 pound	=	1.5
	2 pounds	=	3.0
Or	3 pounds		4.5
	4 pounds	=	6.0
Dry Flowables	5 pounds	=	7.5

HERBICIDE	RATE/Acre		Level TEAspoons	N	lilliliters
Emulsifiable Concentrates	1 pint	=	0.5	or	2.4
Or	1 quart	=	1.0	or	4.7
Flowables	2 quarts	=	2.0	or	9.5
Or	3 quarts	=	3.0	or	14.2
Liquids	1 gallon	=	4.0	or	19.0
Or Solutions	5 quarts	=	5.0	or	23.8

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide rate, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 TEAspoon or 1.2 milliliters, three pints 3/8 TEAspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer

## C. Observations and Decisions

- 1. If the herbicide(s) and the sprayable fluid fertilizer are compatible.
- 2. If a compatibility agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge,

gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicides) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. An emulsifiable concentrate normally will go to the top after standing; wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the herbicide(s) is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the premixing. If it is not compatible without the compatibility agent. The herbicide(s) should be premixed with water before adding to the spray tank

#### APPLICATION SYSTEMS

#### Ground Broadcast Treatment

Apply this product and the labeled tank mixtures in 10 or more gallons of solution per acre using broad-cast boom equipment. The carrier may be either water or sprayable fluid fertilizer as specified for the crop to be treated in the "DIRECTIONS FOR USE" section of this label. Do not apply during periods of gusty winds, when winds are in excess of 15 miles per hour or when other conditions favoring drift exist.

#### Ground Band Treatment

Apply a broadcast equivalent rate and volume per acre. To determine these:

Band width in inches		Broadcast RATE		Band RATE per
Row width in inches	X	Per acre	=	acre
				-
Band width in inches		Broadcast RATE		Band VOLUME per

## Application with dry bulk fertilizer

The herbicide-fertilizer impregnation process (In-Plant and On-Board systems) must be completed only by commercial fertilizer or chemical dealerships properly equipped for this procedure. Contact Monsanto Company for additional information regarding recommended equipment and methods for herbicide-fertilizer impregnation applications.

Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product plus atrazine on corn. This product and these tank mixtures most be applied with 200 to 450 pounds of dry bulk fertilizer per acre and shallowly incorporated within 14 days prior to planting. On medium and fine-textured soils in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional tillage situations, applications can be made up to 30 days before planting to allow moisture to move the herbicide-fertilizer mixture into the soil. On coarse-textured soils, applications can be made up to 14 days prior to planting. The herbicide must be applied as recommended in this label for the crop, weed and soil type treated. Refer to the table for broadcast rate per acre to deter-mine the recommended rate per acre for the herbicide treatment to be applied.

Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited. No more than 500 tons of bulk fertilizer can be impregnated per day. No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.

The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the use (applicator) of the dry bulk fertilizer that:

- Applicators must wear long-sleeved shirt, long pants, shoes plus socks
- Do not enter or allow others to enter the treated areas (except those involving watering) until the watering-in is complete and the surface is dry.

The following table provides a reference to determine the amount of LIQUID herbicide to be mixed per ton of dry bulk fertilizer for a range of herbicide recommendations for fertilizer rates per acre:

Fertilizer Rate					
(pounds/Acre)	(per ton)	1.4	1.8	2.3	
		(quarts of herbicide/Ton Dry Bulk Fertilizer)			
200	10.0	14.0	18.0	23.0	
250	8.0	11.2	14.4	18.6	
300	6.7	9.4	12.0	15.5	
350	5.7	8.0	10.3	13.3	
400	5.0	7.0	9.0	11.7	
450	4.5	6.2	8.0	10.4	

To determine the amount of herbicide needed for rates not included in the preceding table, use the following formula:

#### Recommended Herbicide Rate

Quarts/Acre X 2000	=	Quarts of herbicide
Pounds Fertilizer/Acre		per ton of dry bulk fertilizer

With the In-Plant system, mix and blend the dry fertilizer and herbicide mixture in a closed rotary-drum type mixture allowing sufficient time to ensure uniform coverage. Use at least one ton of dry fertilizer per mixing operation. Inject the herbicide into the drum over a minimum of a 2-minute period and allow at least 2 additional minutes mixing time to ensure uniformity. The nozzle used to spray the herbicide treatment must be placed inside the mixer to provide uniform spray coverage of the tumbling fertilizer.

If the dry fertilizer used has inadequate absorptive capacity, use a higher absorptive material such as Agsorb<sup>TM</sup>, MP-79<sup>TM</sup> or Micro-cel<sup>TM</sup> E, to provide a free-flowing mixture. Contact Monsanto Company for specific guidelines with regard to the sequence of addition for the various components and the amount of drying agent to add to pro-vide a free-flowing mixture.

The following table provides a partial list of dry fertilizers which may be impregnated with this product.

Ammonium sulfate	21-0-0
Ammonium phosphate-sulfate	16-20-0
Diammonium phosphate	18-46-0
Potassium chloride	0-0-60
Potassium sulfate	0-0-52
*Urea	46-0-0

<sup>\*</sup>Some ureas may be phytotoxic when applied on corn. Use only ureas known to be safe to corn.

NOTE: DO NOT impregnate this product or tank mixtures of this product with other herbicides on fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate. Spread the herbicide-dry fertilizer mixture uniformly with a properly calibrated applicator: dribble, pneumatic (air flow) or spin. When using spin applicators, fertilizers impregnated with this product or tank mixtures of this product with other herbicides must be spread at half-rate and overlapped 100 percent to obtain full rate and uniform distribution. Non-uniform spreading of the fertilizer-herbicide mixture may result in unsatisfactory weed control or crop injury.

#### APPLICATION TIMING AND METHODS

The maximum total per crop season of this product is 3.8 quarts.

## Early Preplant Surface Application

This product and some labeled tank mixtures of this product may be applied in no-till and other conservation tillage systems before weeds emerge and up to 45 days before planting field corn or silage corn. Split applications can be made 30 to 45 days prior to planting with 60 percent of the recommended broad-cast rate applied initially and the remaining 40 percent applied at planting. Applications made less than 30 days prior to planting can be made either as a split or as a single application. If weeds are pre-sent at the time of application, apply this product in tank mixture with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

## Preplant Incorporation Application

This product and many of the labeled tank mixtures may be mixed into the soil using shallow incorporation equipment any time within 14 days prior to planting. Apply the recommended treatment rate to the soil surface as a broadcast application. Either existing soil moisture or subsequent precipitation or irrigation is required to bring incorporated herbicide treatments into contact with germinating weed seedlings. If weeds emerge after treatment, rotary hoe or shallowly cultivate immediately to improve performance.

Shallowly incorporate the treatment into the upper 1 to 2 inches of the soil. Equipment should be operated at manufacturer's designed speed for incorporation to ensure adequate mixing and distribution of the herbicide treatment in the soil. Equipment design including any drag attachments must be adequate to avoid soil ridging which may result in streaked or reduced weed control. Soil conditions, including moisture content and crop residue levels, must be suitable to allow thorough and uniform mixing with the equipment used for 1-pass incorporation.

## Preemergence Surface Application

This product and all labeled tank mixtures may be applied to the soil surface after planting and prior to either crop or weed emergence. Apply within 5 days of last preplant tillage. If weeds emerge after treatment, or if treatment is applied more than 5 days after last preplant tillage, rotary hoe or shallowly cultivate immediately to improve performance. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone. The amount of precipitation or overhead sprinkler irrigation required depends on existing soil mixture, soil type and percent organic matter content, but 1/3 to 3/4 inch is normally adequate. Performance is improved when moisture is received within 7 days after application and prior to weed emergence. High intensity or excessive rainfall or excessive irrigation after application may reduce control.

## Postemergence Surface Application

This product and certain tank-mixtures may be applied postemergence until corn reaches 11 inches in height. Application must be made prior to the 2-leaf grass stage or in a tank-mixture that controls emerged weeds. Read and follow all restrictions and directions on tank-mix product labels. Refer to the specific treatment intended in the "DIRECTIONS FOR USE" section of the label to determine if postemergence applications to corn are recommended and determine the proper weed and corn growth stage limitations. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone to control unemerged weeds. The amount of precipitation or irrigation required depends on existing soil moisture, soil type and percent organic matter content, but 1/4 to 3/4 inch is normally adequate. If weeds emerge after treatment, rotary hoe or shallowly cultivate to improve performance.

DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

#### Cultivation Information

Delay cultivation after application for as long as possible unless weeds or grasses emerge. Shallowly cultivate or rotary hoe immediately if weeds or grass emerge. If cultivation is necessary because of soil crusting or compaction, set equipment shallow and minimize lateral soil movement to avoid dilution or displacement of the herbicide treatment. If a band application is used and weeds have emerged in the treated band, set cultivator to throw soil into the row covering the band.

#### WEEDS CONTROLLED

When applied as directed under conditions described, this product will CONTROL the following weeds:

#### ANNUAL GRASSES CONTROLLED

Barnyardgrass Echinocloa crus-galli

Crabgrass Digitaria ischaemum Digitaria sanguinalis

Foxtail, giant Setaria faberi

Foxtail: green, robust purple, robust white Setaria viridis

Foxtail, yellow Setaria lutescens

Goosegrass Eleusine indica

Oat, wild Avena fatua

Panicum, browntop Panicum fasciculatum Panicum, fall Panicum dichotomiflorum

Rice, red Oryza sativa

Signalgrass, broadleaf Brachiaria platyphylla

Sprangletop, red Leptochloa filiformis

Wheat, volunteer Triticum aestivum

Witchgrass Panicum capillare

## ANNUAL BROADLEAVES CONTROLLED

Beggarweed, Florida Desmodium tortuosum

Carpetweed Mollugo verticillata

Cocklebur\* Xanthium strumarium

Galinsoga Galinsoga spp.

Groundcherry, annual Physalis spp.

Groundcherry, cutleaf Physalis angulata

Henbit Lamium amplexicaule

Jimsonweed Datura stramonium

Kochia\*\*
Kochia scoparia

Lambsquarters Chenopodium album

Morningglory, annual\* Ipomoea purpurea Mustard Brassica spp.

Nightshade, black Solanurn nigrum

Nightshade, hairy Solanum sarrachoides

Pigweed, Carelessweed Amaranthus spp.

Purslane Portulaca oleracea

Pusley, Florida Richardia scabra

Ragweed, common Ambrosia antemisiifolia

Sida, prickly; Teaweed Side spinosa

Smartweed
Polygonum pensylvanicum
Polygonum persicaria

Velvetleaf, Buttonweed\* Abutilon theophrasti

Waterhemp Amaranthus tuberculatus

#### SEDGE

Nutsedge, yellow\* Cyperus esculentus

\*Preplant incorporate for control.

## ANNUAL GRASSES PARTIALLY CONTROLLED

When applied immediately after planting and within 5 days of last tillage, this product at a rate of 2.3 to 2.7 quarts per acre on a broadcast basis will reduce competition from the following HARD-TO-CONTROL weeds.

Cupgrass, woolly Enochloa villosa

Johnsongrass, seedling Sorghum halepense Millet, proso Panicum miliaceum

Panicum, Texas Panicum texanum

Sandbur, Grassbur Cenchrus incertus

Shattercane, wildcane Sorghum bicolor

#### ANNUAL BROADLEAVES PARTIALLY CONTROLLED

Ragweed, giant Ambrosia trifida

Sicklepod Cassia obtusifolia

Sunflower, common Helianthus annuus

NOTE: For hard-to-control weeds, additional amounts of Harness herbicide and/or atrazine may be added to the recommended treatment rates for this product to provide improved control. For more consistent control of common cocklebur, annual morningglory or velvetleaf, additional atrazine may be applied so that the total atrazine rate is at least 1.5 quarts per acre on medium-textured soil with less than 3 percent organic matter, and 1.5 to 2 quarts on medium- and fine-textured soils with 3 percent or greater organic matter content. For more consistent control of woolly cupgrass additional Harness may be applied so that the total acetochlor rate is 3.0 pounds per acre. The following table shows the amounts of Harness and/or atrazine that can be added to specific treatment rates of this product.

The maximum atrazine broadcast application rates for corn:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient per acre broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds active ingredient per acre per calendar year.
- Apply a maximum of 2.0 pounds active ingredient per acre as a single preemergence application on soils that are not highly erodible or on highly erodible soils (as defined by the Natural Resources Conservation Service) if at least 30 percent of the soil is covered with plant residues.
- Apply a maximum of 1.6 pounds active ingredient per acre as a single preemergence application on highly erodible soils (as defined by the Natural Resources Conservation Service) if <30 percent of the surface is covered with plant residues; or 2.0 pounds active ingredient per acre if only applied postemergence.

Do not use more than 2.7 quarts of this product per acre per calendar year. APPLICATION RATES:

RECOMMENDED RATE	PRODUCT ADDITION (maximum rate)		
ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ACETOCHLOR 7E (pints)	ATRAZINE (quarts)	
1,4	2.0	1.1	
1.8	1.8	0.8	
2.3	1.3	0.5	

#### CONSERVATION OR MINIMUM TILLAGE SYSTEMS

NOTE: Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications, which are not consistent with recommendations in this label, may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS AND METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

## Tank Mixtures At-Planting Applications

The tank mix recommendations in the Conventional Tillage Section of this label may also be followed when using Conservation or Minimum Tillage Systems. Follow all label precautions, directions and restrictions of tank mix partners.

When applied as directed under the conditions described, the recommended tank mixtures control many emerged annual weeds, suppress many emerged perennial weeds and give preemergence control of many annual grasses and weeds when corn will be planted directly into a cover crop, established sod or in previous crop residues. These tank mixtures will not control regrowth from perennial weeds.

### DO NOT APPLY BY AIR.

Refer to specific product labels for crop rotation restrictions and precautionary statements of all products used in these tank mixtures.

## Additional Preemergence Control

ACETOCHLOR 3.1 + ATZ 2.5 and tank mixtures with Princep<sup>TM</sup> or Pursuit can be tank-mixed with a Roundup agricultural herbicide, Gramoxone Extra and/or 2,4-D. Refer to specific sections for detailed instructions for tank mixes with Princep or Pursuit.

ACETOCHLOR 3.1 + ATZ 2.5 may be tank-mixed with Princep and a Roundup agricultural herbicide, Gramoxone Extra and/or 2,4-D. Apply the recommended tank mixtures with a Roundup agricultural herbicide or 2,4-D (amine or low volatile ester) in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre, or the tank mixtures with Gramoxone Extra in 20 to 60 gallons of water or clear liquid fertilizer per acre immediately before, during or after planting, but BEFORE CROP EMERGENCE. As density of stubble, crop residue or weeds increase, spray gallonage and rate should be increased within the recommended ranges to ensure complete coverage. In the absence of emerged vegetation, delete the Roundup agricultural herbicide, Gramoxone Extra or 2,4-D portion of these tank mixtures.

## Control or Suppression of Emerged Weeds

ATTENTION: AVOID DRIFT-EXTREME CARE MUST BE USED WHEN APPLYING THESE TANK MIXTURES TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS. Do not allow spray mist to drift

since even minute quantities of spray can cause severe damage or destruction to nearby crops, plants or other areas on which treatment is not intended. Do not apply when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.

Roundup WeatherMAXTM Herbicide

#### Annual Weeds

Apply Roundup WeatherMAX herbicide, or other Roundup agricultural herbicides, in these tank mixtures at the proper rate for the weed per the label instructions.

#### Perennial Weeds

At normal application dates in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. Use of 1.3 to 2.7 quarts of Roundup WeatherMAX herbicide per acre, or equivalent rates of other Roundup agricultural herbicides, in the recommended mixtures under these conditions provides top kill and reduces competition from many emerged perennial grasses and broadleaf weeds.

USE OF THIS MIXTURE FOR BERMUDAGRASS OR JOHNSONGRASS CONTROL IS NOT RECOMMENDED.

NOTE: When using these tank mixtures, do not exceed 2.7 quarts of Roundup WeatherMAX herbicide per acre.

#### Ammonium Sulfate

The addition of ammonium sulfate in the spray solution may increase the performance of Roundup agricultural herbicide tank mixtures on emerged annual weeds under adverse growing conditions. When using ammonium sulfate, add 2 percent dry ammonium sulfate by weight or 17 pounds per 100 gallons of water. Ammonium sulfate should be added to the water in the spray tank and completely dissolved prior to adding the herbicide or surfactant. Do not mix ammonium sulfate in fluid fertilizer solutions. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet lines. Nozzle tip plugging may result from the use of low quality ammonium sulfate. To determine quality, perform a jar test by adding 113 cup of ammonium sulfate to 1 gallon of water and agitate for one minute. If undissolved sediment is observed, predissolve the ammonium sulfate in water and filter prior to adding to the spray tank.

#### Surfactants

Nonionic surfactants that are labeled for use with herbicides may be used with some Roundup agricultural herbicides check specific label for restrictions. Do not reduce rates of Roundup agricultural herbicides when adding surfactant. Use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants that contain at least 50 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 50 percent active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

#### Gramoxone Extra

When used as directed, Gramoxone Extra in a labeled tank mixture controls many emerged annual weeds and suppresses many emerged perennial weeds.

#### **Broadcast Treatment**

Apply 1.5 to 3 pints of Gramoxone Extra per acre in the recommended tank mixtures immediately before, during or after planting but BEFORE CROP EMERGENCE. Use 2 to 2.5 pints when weeds are 3 to 6 inches tall. Use 2.5 to 3 pints when weeds are 6 inches tall. This mixture may not control weeds taller than 6 inches. As density of stubble, crop residue or weeds increases, spray gallonage should be increased within the recommended range for complete coverage. Add a nonionic spreader surfactant (approved for use on crops) containing at least 75 percent surfactant active agent at 8 ounces per 100 gallons of diluted spray. REFER TO THE GRAMOXONE EXTRA LABEL FOR PRECAUTIONARY STATEMENTS.

#### 2.4-D

When used as directed, 2,4-D in labeled tank mixtures controls many emerged annual and perennial broadleaf weeds. For emerged weeds controlled, see the "WEEDS CONTROLLED" section of the label for 2,4-D.

#### **Broadcast Treatment**

Apply 1 to 2 pints of 2,4-D (amine or low-volatile ester) in the recommended tank mixtures. Applications should be made 7 to 14 days before planting or 3 to 5 days after planting but BEFORE CORN EMERGES. As density of stubble, crop residue or weeds increase, spray gallonage should be increased within the recommended range for complete coverage.

DO NOT use 2,4-D on light, sandy soils, or where soil moisture is inadequate for normal weed growth.

#### Early Preplant Application

If emerged weeds are present at the time of treatment, a Roundup agricultural herbicide, Gramoxone Extra or 2,4-D should be added to this product according to the directions for use on their respective product labels. If unsatisfactory weed control occurs (due to excessively dry or excessively wet conditions) following the earlier application, a postemergence application of an appropriate labeled grass and/or broadleaf weed herbicide may be used. If a postemergence treatment includes the herbicide used early preplant, do not exceed the labeled rate for corn on a given soil texture. Observe all precautions and limitations on the labels for ACETOCHLOR 3.1 + ATZ 2.5, Roundup agricultural herbicides, Gramoxone Extra, 2,4-D and other postemergence herbicides before use of these products.

DO NOT apply tank mixtures containing a Roundup agricultural herbicide, Gramoxone Extra or other contact herbicides by air.

#### ACETOCHLOR 3.1 + ATZ 2.5

## For Use in Early Preplant

This product, when applied in a single application or split application (alone or in a tank-mix combination with Princep section 12.11) or as a sequential application to Princep in early preplant programs will provide preemergence control or reduced competition of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. If weeds are emerged at time of application, apply a labeled contact herbicide with this product. Observe the directions for use, precautions and restrictions on the label of the contact herbicide.

Approved Application Systems Ground--Broadcast boom Dry Bulk Fertilizer Impregnation

Single application

Application of this product should be made less than 30 days before planting but prior to weed emergence. On coarse-textured soils applications should not be made more than 2 weeks prior to planting.

Split application

Apply 60 percent of the recommended rate as a split application prior to weed emergence and no more than 45 days prior to planting and the remaining 40 percent at or immediately following planting but before crop emergence.

See the following table for recommended broadcast rates per acre for single and split applications.

#### APPLICATION RATES

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE [ACETOCHLOR 3.1 + ATZ 2.5)* (quarts)		
Coarse	1.7 to 2.3		
Medium	2.3 to 3.0		
Fine	2.3 to 3.0		

<sup>\*</sup>Use the higher rate in the recommended range in areas of heavy weed infestation.

This product may also be tank mixed with 1 to 1.25 quarts per acre of Princep to provide improved control of fall panicum and crabgrass.

NOTE: Do not exceed a total of 1.6 pounds of atrazine per acre on highly erodible soils with less than 30 percent plant residue cover.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

Sequential application

Application of this product following Princep (See section 12.11) should be utilized for the control of fall panicum, crabgrass or broadleaf signal grass. Apply 1 to 1.25 quarts per acre of Princep prior to weed emergence and no more than 45 days prior to planting. At or immediately following planting, but before crop emergence, apply the recommended rate of this product.

Following application of Princep see the following table for recommended rates.

#### APPLICATION RATES

LU	
	BROADCAST RATE PER ACRE
SOIL TEXTURAL GROUP	ACETOCHLOR 3.1 + ATZ 2.5 *
Coarse	1.7
Medium	2.3
Fine	2.3 to 3.0

<sup>\*</sup>Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: Do not exceed a total of 1.6 pounds of atrazine per acre on highly erodible soils with less than 30 percent plant residue cover.

When using Princep 90 DF use equivalent rates. One quart of Princep 4L equals 1.1 pounds of Princep 90 DF.

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

#### CONVENTIONAL TILLAGE

NOTE: Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications that are not consistent with recommendations in this label may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH, sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS and METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

#### ACETOCHLOR 3.1 + ATZ 2.5

Apply this product in water or sprayable fluid fertilizer solution.

APPROVED APPLICATION SYSTEMS Ground—Broadcast boom; banded Dry bulk fertilizer impregnation

## APPROVED APPLICATION METHODS

Preplant Incorporated; Preemergence Surface: Postemergence Surface
Apply this product before weeds reach the 2-leaf stage and the corn is no more than 11 inches in height.

## APPLICATION RATES:

	BROADCAST RATE PER ACRE		
SOIL TEXTURE	Less than 3% organic matter 3% or more orga (quarts) (quarts)		
Coarse	1.4	1.7	
Medium	1.7 to 2.4	2.3 to 2.6	
Fine	2.3 to 2.6	2.3 to 3.0	

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Roundup WeatherMAX on Roundup Ready® Corn and Roundup Ready Corn 2

This program may be used preemergence and postemergence to Roundup Ready Corn and Roundup Ready Corn 2 until the corn reaches 11 inches in height. Refer to the Roundup WeatherMAX or other Roundup agricultural herbicide labels for specific weeds controlled postemergence.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN THE ROUNDUP READY GENE.

Approved Application Systems Ground—Broadcast boom

Approved Application Methods

Preemergence Surface

Sequential Program: This product may be applied preemergence to Roundup Ready Corn or Roundup Ready Corn 2 at the Roundup Ready Rate of 1.5 quarts per acre in a planned preemergence followed by Roundup agricultural herbicide postemergence sequential program.

Postemergence Surface

This product is applied postemergence to Roundup Ready Corn or Roundup Ready Corn 2 from seedling emergence until the corn is 11 inches in height. The Roundup Ready rate for this product is 1.5 quarts per acre. Labeled use rates for this tank-mix are defined in the table below. Use the higher rate on larger weeds and where heavy weed infestations exist. This tank mix should be applied when weeds are 2 to 4 inches in height and before the weed height and/or density become competitive with the crop.

For difficult to control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signalgrass and Pennsylvania smartweed use the higher rate of Roundup WeatherMAX or equivalent rates of other Roundup agricultural herbicides.

For mixing instructions, see the "MIXING, SPRAYING AND HANDLING" section of this label.

ROUNDUP READY RATE - ACETOCHLOR 3.1 + ATZ 2.5 at 1.5 quarts per acre

Application Rates (minimum and maximum range)

SOIL TEXTURE	BROADCAST RATE PER ACRE			
	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ROUNDUP WEATHERMAX (ounces)		
Coarse	1.0 to 2.9	16 to 22		
Medium	1.0 to 3.7	16 to 22		
Fine	1.0 to 3.7	16 to 22		

## ACETOCHLOR 3.1 + ATZ 2.5 plus Accent

Apply this tank mixture in water after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Accent herbicide label for specific weeds controlled postemergence.

Approved Application Systems Ground—Broadcast boom; banded

## APPROVED APPLICATION METHODS

## Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and until grasses are 3 inches in height. Always add a nonionic surfactant at 0.25% v/v. Addition of Banvel or Permit will improve performance on broadleaf weeds.

## APPLICATION RATES:

SOIL TEXTURE	BROADCAST RATE PER ACRE				
	Less than 3% Organic Matter		3% or more Organic Matter		
	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ACCENT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ACCENT (ounces)	
Coarse *	1,4	1 /2 to 2/3	1.7	1/2 to 2/3	
Medium	1.7 to 2.3	1/2 to 2/3	2.3	1/2 to 2/3	
Fine	2.3	1/2 to 2/3	2.3 to 3.0	1/2 to 2/3	

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

## ACETOCHLOR 3.1 + ATZ 2.5 plus Balance™ PRO

For Use In Field Corn And Silage Corn

Approved Application Systems Ground – Broadcast boom; banded.

Approved Application Method

#### Preemergence Surface

Balance PRO is not registered in all states. Follow all Restrictions and Precautions on the Balance PRO label including planting depth, environmental precautions, and soil type restrictions.

Follow the Balance PRO Technical Bulletins, 24(c) labels and 2(ee) recommendations for additional use rate restrictions based on soil textures and depth to ground water in various states.

#### APPLICATION RATES:

	BROADCAST RATE PER ACRE				
SOIL TEXTURE	Less than 3% Organic Matter		3% or more Organic Matter		
	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BALANCE PRO (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BALANCE PRO (ounces)	
Coarse*	1.00 to 1.4	1.0 to 1.88	1.25 to 1.7	1.0 to 1.88	
Medium	1.25 to 2.4	1.0 to 2.50	1.75 to 2.4	1.5 to 3.00	
Fine	1.75 to 2.4	1.5 to 2.75	1.75 to 2.4	2.0 to 3.50	

<sup>\*</sup>It is not recommended to use Balance PRO on coarse soils with less than 1.5 percent organic matter

ACETOCHLOR 3.1 + ATZ 2.5 plus Banvel or Clarity

For use on level or flat-planted field corn on soils with more than 2 percent organic matter

Apply in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

## Preemergence Surface

Corn seeds must be planted 1 - 1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1 - 1/2 inches beneath the soil surface.

For Use on Kochia - Preemergence Surface only – Banvel and Clarity tank mix rates may be reduced to 0.25 to 0.5 pint per acre in soils less than 3% organic matter, or 0.5 pint per acre in soils equal to or greater than 3% organic matter, Follow all label restrictions.

#### Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 8 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control, Addition of Accent to this tank mixture will improve control of emerged grasses. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. Posternergence surface applications using sprayable fluid fertilizer as the carrier are not recommended because severe crop injury may occur.

NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

#### APPLICATION RATES:

SOIL TEXTURE	BROADCAST RATE PER ACRE				
	Less than 3% Organic Matter		3% or more Organic Matter		
	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BANVEL or CLARITY (pints)	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BANVEL or CLARITY (pints)	
Coarse *	1.4	1.0	1.7	1.0	
Medium	1.7 to 2.3	1.0	2.3	1.0	
Fine	2.3	1.0	2.3 to 13.0	1.0	

<sup>\*</sup> On coarse-textured soils containing 2 percent or more organic matter, use ACETOCHLOR 3.1 + ATZ 2.5 plus Banvel only on sandy loam. Do not use on sand and loamy sand with less than 2 percent organic matter.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

## ACETOCHLOR 3.1 + ATZ 2.5 plus Callisto

For Postemergence Surface Applications for Field Corn, Production Seed Corn and Silage Corn

Approved Application Systems
Ground—Broadcast boom; banded

Approved Application Methods

#### Postemergence Surface

Callisto is not registered in all states. Follow all Restrictions and Precautions on the Callisto label including planting depth, environmental precautions, and soil type restrictions.

Do not apply to the following soils if ground water depth is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter or sandy learns with less than 1 percent organic matter.

## APPLICATION RATES:

ACETOCHLOR 3.1 + ATZ 2.5 may be tank mixed with 3 ounces of Callisto for postemergence applications. Use the labeled rates of ACETOCHLOR 3.1 + ATZ 2.5 that correspond to the soil texture and organic matter. Broadleaf weeds should not exceed 5 inches in height and corn must be sprayed before it exceeds 11 inches in height. Accent herbicide may be added for postemergence grass control. Follow the label for Accent rates and maximum grass sizes.

Add 2.5% (v/v) spray grade UAN (28%N) or AMS (8.5 lbs/100 gallons spray solution) DO NOT use Methylated Soybean Oil (MSO). DO NOT make post applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

ACETOCHLOR 3.1 + ATZ 2.5 plus Hornet™ WDG

Only Apply This Tank Mixture to Field Corn

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems Ground--Broadcast boom; banded

Approved Application Methods

Preplant Surface, Preplant Incorporated Applied

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe all directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

Preemergence Surface

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Adequate soil moisture is required for optimum herbicidal activity. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone.

This tank mixture may be combined with Accent herbicide at 1/3 to 213 ounces per acre to increase control of emerged grasses. Follow all label restrictions and directions.

NOTE: For all soil applications of this tank mixture, corn seeds must be planted 1-112 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter<sup>TM</sup> (terbufos) or Thimet<sup>TM</sup> (phorate) insecticides are to be applied due to the risk of severe crop injury.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 11 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. Include a non-ionic surfactant at 0.25 percent v/v (1 qt/100 gal) or crop oil concentrate at 1 percent v/v for all postemergence applications. DO NOT make postemergence surface tank mixture applications using sprayable fluid fertilizer as the total carrier because severe crop injury may occur.

NOTE: Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

NOTE: OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE ACETOCHLOR 3.1 + ATZ 2.5 AND HORNET WDG LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

## Application Rates

SOIL TEXTURE	BROADCAST RATE PER ACRE				
	Less than 3% Organic Matter		3% or more Organic Matter		
	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	Hornet WDG* (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	Hornet WOG (ounces)	
Coarse	1.4	3.0	1,7	3.0	
Medium	1.7 to 2.4	3.0 to 4.0	2.3 to 2.6	3.0 to 4.0	
Fine	2.3 to 2.6	3.0 to 4.0	2.3 to 3.0	3.0 to 4.0	

<sup>\*</sup> Hornet may be substituted for Hornet WDG at 80% of the rates above.

ACETOCHLOR 3.1 + ATZ 2.5 plus Marksman

For use on level or flat-planted field com on soils with more than 2 percent organic matter.

Apply in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground-Broadcast boom; banded

Approved Application Methods

Preemergence Surface

Corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1-1/2 inches beneath the soil surface.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 8 inches in height.

NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

#### APPLICATION RATES:

SOIL TEXTURE	BROADCAST RATE PER ACRE				
	2% to 3% Organic Matter		3% or more Organic Matter		
	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	MARKSMAN (pints)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	MARKSMAN (pints)	
Coarse*	1.4	2.5 to 3.5	1.7	2.5 to 3.5	
Medium	1.7	2.5 to 3.5	1.7	2.5 to 3.5	
Fine	1.7	2.5 to 3.5	1.7	2.5 to 3.5	

<sup>\*</sup>On coarse-textured soils containing 2 percent or more organic matter, use ACETOCHLOR 3.1 + ATZ 2.5 plus Marksman only on sandy loam. Do not use on sand and loamy sand with less than 2 percent organic matter.

ACETOCHLOR 3.1 + ATZ 2.5 plus Permit

Apply this tank mixture in water after crop emergence.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and before grass weeds reach the 2-leaf stage. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected.

### APPLICATION RATES:

SOIL TEXTURE	BROADCAST RATE PER ACRE"				
	Less than 3% Organic Matter		3% or more Organic Matter		
	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PERMIT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PERMIT (ounces)	
Coarse	1.4	0.67	1.7	0.67	
Medium	1.7 to 2.3	0.67	2.3	0.67	
Fine	2.3	0.67	2.3 to 3.0	0.67	

<sup>\*</sup>In areas of heavy weed infestation use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Prowl

Apply this tank mixture in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground—Broadcast boom; banded Dry Bulk Fertilizer Impregnation

Approved Application Methods

Preemergence Surface

DO NOT preplant incorporate this tank mixture as serious crop injury can result.

#### APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	2% to 3% Organic Matter		3% or more Organic Matter		
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PROWL* (quarts)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PROWL* (quarts)	
Coarse	1.4	0.8	1.7	0.8 to 1.0	
Medium	1.7 to 2.3	0.8 to 1.0	2.3	1.0	
Fine	2.3	1.0	2.3 to 3.0	1.0	

<sup>\*</sup> Use rates listed in this label using Prowl. Use equivalent rates when using Prowl 3.3 EC formulation. One

quart of Prowl equals 1.2 quarts of Prowl 3.3 EC. Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Pursuit

Apply this tank mixture either before or after crop emergence. Refer to the Pursuit herbicide label for specific weeds controlled postemergence.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Preplant Incorporated; Preemergence Surface

Postemergence Surface

Apply this tank mixture before weeds reach 3 inches in height and the corn is no more than 11 inches in height. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

NOTE: THIS TANK MIXTURE IS FOR USE ONLY ON SELECTED FIELD CORN HYBRIDS (MI-CORN) WARRANTED BY THE SEED COMPANY TO POSSESS RESISTANCE/TOLERANCE TO DIRECT APPLICATION OF PURSUIT (FOR EXAMPLE: PIONEER IR HYBRIDS). DO NOT APPLY PURSUIT TO CORN HYBRIDS WHICH LACK GENETIC RESISTANCE/TOLERANCE TO PURSUIT HERBICIDE. OBSERVE ALL PRECAUTIONS AND LIMITATIONS ON THE ACETOCHLOR 3.1 + ATZ 2.5 AND PURSUIT LABELS BEFORE USE OF THIS TANK MIXTURE INCLUDING PRECAUTIONS ON MINIMUM RECROPPING INTERVAL AND ROTATIONAL GUIDELINES.

#### APPLICATION RATES:

	BROADCAST RATE PER ACRE				
SOIL TEXTURE	Less than 3% Organic Matter		3% or more Organic Matter		
	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PURSUIT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PURSUIT (ounces)	
Coarse	1.4	4	1.7	4	
Medium	1.7 to 2.3	4	2.3	4	
Fine	2.3	4	2.3 to 3.0	4	

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Python TM WDG

Only Apply This Tank Mixture to Field Corn

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems Ground-Broadcast boom; banded

Approved Application Methods

Preplant Surface Applied

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

#### Preemergence Surface

NOTE: For all soil applications of this tank mixture, corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter (terbufos) or Thirnet (phorate) insecticides are to be applied due to the risk of severe crop injury.

NOTE: Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

NOTE: OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE ACETOCHLOR 3.1 + ATZ 2.5 AND PYTHON LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

#### Application Rates

	BROADCAST RATE PER ACRE						
	Less than 3% (	Organic Matter	3% or more Or	ganic Matter			
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PYTHON WDG* (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PYTHON WDG (ounces)			
Coarse	1.4	0.80	1,7	0.89			
Medium	1.7	0.89	2.3 to 2.6	1, 0			
Fine	2.3 to 2.6	0.89	2.3 to 3.0	1.0			

<sup>\*</sup> In areas of heavy weed infestation use up to 4.3 quarts per acre on medium- and fine-textured soils.

<sup>\*\*</sup> Refer to the "USE RESTRICTIONS" and "GENERAL INFORMATION" sections of this label and Python WDG for restrictions

ACETOCHLOR 3.1 + ATZ 2.5 plus Princep

For additional preemergence control of heavy weed infestations and/or hard-to-control weeds listed in the "WEEDS CONTROLLED" section of this label, refer to the following rate table to determine the recommended rates for this tank mixture on various soil types.

	BROADCAST	RATES PER ACRE
SOIL TEXTURAL GROUP	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PRINCEP 4L" (quarts)
Coarse	1.7	0.8 to 1.0
Medium	2.3	1.0 to 1.5
Fine	2.3 to 3.0	1.0 to 1.5

\* Use rates listed in this label using Princep 4L. Use equivalent rates when using the Princep Caliber 90 formulation. One quart of Princep 4L equals 1.1 pounds of Princep Caliber 90. Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

#### LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN

CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES,

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

Harness, Roundup, Roundup Ready and Roundup WeatherMAX are trademarks of Monsanto Technology LLC.

Permit is a registered trademark of, and used under license from, Nissan Chemical Industries, Ltd. All other trademarks are the property of their respective owners.

<b>⊕EPA</b>	United States Environmental Protect Weekington, DC 2	tion Agency	1	Registr Amend Other		OPP Identifier Number
	Applicat	tion for Pesticide - Se	ection	1		
1, Company/Product Numbe 42750-RN1		2. EPA Product N J. Tompkins	deneger		3. Pr	oposed Classification
4. Company/Product (Name) Acetochlor 3.1 + Atrazi		PM3 25				
5. Name and Address of Ap Albaugh Inc. P.O. Box 2127 Valdosta, GA 31604		(b)(i), my produ to: EPA Reg. No Product Nam	ct is slr	nilar or ider	ntical in co	FIFRA Section 3(c)(3) imposition and labeling
		Section - II				
Amendment - Explain  Resubmission in resp  Notification - Explain	conse to Agency letter dated	2/22/05 Agency -Me To	nted leb letter de o" Appli Explain l	ration.	ee to	
Material This Product Will Child-Resistent Packaging     Yes	II Be Packaged In: Unit Packaging Yes	Section - III  Water Soluble Packaging Yes		2. Туре с	f Containe	
Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging Yes No If "Yes" No. p	64'	2. Түрө с	Metal Plantic Glass Paper	Specify)
Child-Resistent Peckaging Yes V No Cartification must be submitted 3. Location of Nat Contents V Label	Unit Packaging  Yes  No  If "Yes"  Unit Packaging wgt.  Information  4. Size(s) incorrations	Water Soluble Packaging Yes No If "Yes" No. p Package wg1 conta Retall Container 2.5 gl, bulk	er iner	vention of Li	Metal Plastic Glass Paper Other (	Specify)
Child-Resistant Packaging Yes V No * Cartification must be submitted 3. Location of Nat Contents V Lebel C	Unit Packaging  Yes  No  If "Yes"  Unit Packaging wgt.  Information  4. Size(s) incorrations	Water Soluble Packaging Yes No If "Yes" No. p Package wgt conta Retall Container 2.5 gl, bulk	er er	vention of Li	Metal Plastic Glass Paper Other (	Specify)
Child-Resistant Packaging Yes V No * Cartification must be submitted 3. Location of Nat Contents V Label C	Unit Packaging  Yes  No  If "Yes" Unit Packaging wgt.  Information Ontainer  Affixed to Product  Lish Pag Ste	Water Soluble Packaging  Yes No  If "Yes" No. p Package wg1 conts  Retall Container 2.5 gl, bulk hograph per glued misiled  Section - IV	5. L	ocation of Li	Metai Plantic Glade Paper Other (	Specify) ons d to container
Child-Resistent Packaging Yes Yes You * Certification must be submitted  Location of Net Contents  Y Label	Unit Packaging  Yes  No  If "Yes"  Unit Packaging wgt.  Information  4. Size(s) incorrations	Water Soluble Packaging  Yes No  If "Yes" No. p Package wg1 conts  Retall Container 2.5 gl, bulk hograph per glued misiled  Section - IV	5. L	ocation of Li	Metal Plastic Glass Paper Other (	Specify) one if to container  r application.j
Child-Resistant Peckaging  Yes  No  * Certification must be submitted  3. Location of Net Contents  V Label   Contents   Complete  1. Contact Point (Complete	Unit Packaging  Yes  No  If "Yes" Unit Packaging wgt.  Information Ontainer  Affixed to Product  Lish Pag Ste	Water Soluble Packaging  Yes No  If "Yes" No. p Package wg1 conts  Retall Container 2.5 gl, bulk hograph per glued misiled  Section - IV	5. L	ocation of Li	Metal Plastic Glass Paper Other (	Specify) ons if to container  s application.j we No. (Include Area Code)
Child-Resistant Peckaging  Yes  You  * Cartification must be submitted 3. Location of Net Contents  [V Label   Contents 6. Manner in Which Label is 1. Contact Point (Complete Marris Gaskins  I certify that the state	Unit Packaging  Yes  No. per Unit Packaging wgt. Container  Information  A Sizo(a) if Container  Affixed to Product  Items directly below for identifications  Certifications in the period on this form a sy knowlingity false or misteaking.	Water Soluble Packaging Yes You If 'Yes' No. Package wgt container 2.5 gl, bulk hogreph Per glued modeled Saction - IV ation of individual to be contact Title Registrations Manager ication and all attachments thereto are	5. L	On lab	Metal Plantic Glass Papar Other (	Specify) ons if to container  s application.j we No. (Include Area Code)
Child-Resistant Packaging  Yes  Yes  No  * Cartification must be submitted  3. Location of Net Contents  Y Label C  6. Menner in Which Label is  1. Contact Point (Complete Morris Gaskins  f certify that the state f acknowledge that or	Unit Packaging  Yes  No. per Unit Packaging wgt. Container  Information  A Sizo(a) if Container  Affixed to Product  Items directly below for identifications  Certifications in the period on this form a sy knowlingity false or misteaking.	Water Soluble Packaging Yes You If 'Yes' No. Package wgt container 2.5 gl, bulk hogreph Per glued modeled Saction - IV ation of individual to be contact Title Registrations Manager ication and all attachments thereto are	5. L	On lab	Metal Plantic Glass Papar Other (	Specify)ons ons of to container  s application.j we No. (Include Area Code) 3298  S. Date Application Received

Formulator's Exemption Statement [40 CFR 152.85]  Applicant's Name and Address Abough Inc. 121 No. 1810 53. Applicant's Name Address Applicant's Name Analysis of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  applicant in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active ingredient:  Product Name  Registration Number	Formulator's Exemption Statement  (40 CFR 152.85)  Applicant's Name and Address  Abough Inc.  21 NET 1819 St.  Arkenny, IA 50921  As an authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  above the applicant in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (FPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and produc name, the source of the active ingredient(s) listed in paragraph (1).  (B) The Confidential Statement of Formula (CSF) (EPA FORM 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active Ingredient  Product Name  Registration Number	≎FPA	United States Environmental Protection Agency
Abough Inc.  121 NE 19th St.  121 NE 19th St.  Arkeny, IA 50021  As an authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  absolutor  (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active ingredient  Product Name  Registration Number	About inc.  42790-RNI  42790-RNI	<b></b>	mulator's Exemption Statement
Product Name Acatochlor 3.1 + Alizatina 2.5  Data of Confidential Statement of Formula (EPA Form 8570-4) 12/22/06  As an authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  applicable  (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's examption.  Source  Active Ingredient  Product Name  Registration Number	Product Name Acatochlor 3.1 - Alrazina 2.5 Date of Confidential Statament of Formula (EPA Form 8570-4) 12/22/05  As an authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s): abslichler alrazine  (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's examption.  Source  Active ingredient  Product Name  Registration Number	Applicant's Name and Address	
Acetochlor 3.1 - Alizarina 2.5  Date of Confidential Statement of Formula (EPA Form 8570-4) 12/22/05  As an authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  application  (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active Ingredient  Product Name  Registration Number	Acatochlor 3.1 - Alrazina 2.5  Date of Confidential Statament of Formula (EPA Form 8570-4)  12/2205  As an authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  applicable  (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) indicate by checking (A) or (B) below which paragraph applies:  (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active ingredient  Product Name  Registration Number	121 NE 18th St.	
As an authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  absorber  (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's examption.  Source  Active Ingredient  Product Name  Registration Number	As an authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  applicable authorized representative of the applicant for registration of the product identified above, I certify that:  (1) This product contains the following active ingredient(s):  applicable authorized product contains the following active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be tabeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active Ingredient  Product Name  Registration Number	Ankeny, IA 90021	
(1) This product contains the following active ingredient(s):  abstractive  (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Registration Number	(1) This product contains the following active ingredient(s):  absticulties alrazine  (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (FPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active Ingredient  Product Name  Registration Number		
(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Registration Number	2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active ingredient  Product Name  Registration Number	As an authorized representative of the ap	oplicant for registration of the product identified above, I certify that:
(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active Ingredient  Product Name  Registration Number	(2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active ingredient  Product Name  Registration Number	(1) This product contains the following	g active ingredient(s):
Ingredient in the manufacturing, formulation or repackeging another product which contains that active Ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) Indicate by checking (A) or (B) below which paragraph applies:  (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  OR  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's exemption.  Source  Active Ingredient  Product Name  Registration Number	Ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.  (3) indicate by checking (A) or (B) below which paragraph applies:  (4) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).  (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.  (4) The following active ingredients in this product qualify for the formulator's examption.  Source  Active Ingredient  Product Name  Registration Number		
Source Active Ingredient Product Name Registration Number acstochlor	Source Active Ingredient Product Name Registration Number Institution Intrazine	which is registered under FIFRA Se each use for which my product is p  (3) indicate by checking (A) or (B) belo  (A) An accurate Confidential Statemattached to this statement. That for name, the source of the active ingr	ection 3, is purchased by us from another producer, and is labeled for at least proposed to be labeled.  Dow which paragraph applies:  ment of Formula (EPA FORM 8570-4) for the above identified product is primula statement indicates, by company name, registration number, and product in paragraph (1).  OR  Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA in the company name of th
Active Ingredient Product Name Registration Number	Active Ingredient Product Name Registration Number	(4) The following active ingredients in	
acetochlor acetochlor	atrazine atrazine	Antive Ingradient	
struzine		acatochlor	(100 miles)
atrazine			
	*Product ingradient source information may be entitled to confidential tre	atrazine	
*Product ingredient source information may be entitled to confidential tre		*Product ingredient sou	 urce information may be entitled to confidential tr
*Product ingredient source information may be entitled to confidential tre		*Product ingredient sou	 urce information may be entitled to confidential tr 
*Product ingredient source information may be entitled to confidential tre		*Product ingredient sou	urce information may be entitled to confidential tr
*Product ingredient source information may be entitled to confidential tre		*Product ingredient sou	urce information may be entitled to confidential tr
*Product ingredient source information may be entitled to confidential tre		*Product ingredient sou	urce information may be entitled to confidential tr

\*Pages 42-43 Confidential Statement of Formula may be entitled to confidential treatment\*



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

## TECHNICAL REVIEW BRANCH SIMILARITY CLINIC DETERMINATION

## 25/MAY/2005

### MEMORANDUM

Subject:

Name of Pesticide Product: ACETOCHLOR 3.1 + ATZ 2.5

EPA File Symbol:

42750-RNI

DP Barcode:

D316466 356242

Decision No.:

080803 Atrazine

PC Code:

121601 Acetochlor

From:

Rick J. Whiting, Biologist

Technical Review Branch

Registration Division (7505C)

To:

Erik Kraft, RM Team 25

Herbicide Branch

Registration Division (7505C)

Applicant:

Algaugh, Inc.

121 NE 18th Street

Ankeny, IA 50021

## FORMULATION FROM LABEL:

Active Ingredient(s): Acetochlor (CAS No. 34256-82-1 121601

% by wt. 33.4%

Atrazine (CAS No. 1912-24-9) 080803

26.9%

Inert Ingredient(s):

39.7%

100.0% Total:

## ACTION REQUESTED: The Risk Manager requests:

"Please determine whether 42750-RNI is substantially similar to 524-485. The applicant requests that the Agency rely upon acute toxicity studies previously submitted by Albaugh in support of Acetochlor 4.3 + ATZ 1.7."

BACKGROUND: Algaugh, Inc. has applied for registration of Acetochlor 3.1 + ATZ 2.5, EPA File Symbol 42750-RNI, claiming similarity to MON 8434 HERBICIDE, EPA Reg. No. 524-485. Both products are used as a preemergence herbicide for weed control in field corn, production seed corn, silage corn and popcorn. The acute toxicity studies submitted for the cited product, 254-485, were reviewed in a previous Agency memo (Perry, EPA File Symbol 524-UIL; 30/MAR/1995).

#### RECOMMENDATIONS:

- 1. The registrant requested "that the Agency rely upon acute toxicity studies previously submitted by Albaugh in support of Albaugh's application to register ACETOCHLOR 4.3 + ATZ 1.7." The Technical Review Branch (TRB) was unable to consider this request based on the following: a) The cited product, EPA Reg. No. 254-485, had six reviewed acute toxicity studies to support its registration and b) the percentage of the active ingredients in ACETOCHLOR 4.3 + ATZ 1.7, EPA File Symbol 42750-RNA, was significantly different from EPA File Symbol 42750-RNI.
- 2. After comparing the Confidential Statement of Formula of the EPA Reg. No. 254-485 and EPA File Symbol 42750-RNI, TRB was concerned about the differences in the inerts between the two products. While TRB does not believe these differences would affect the systemic toxicity of EPA File Symbol 42750-RNI, TRB does believe it has the potential to affect eye irritation. Therefore, TRB is requesting that a primary eye irritation study be conducted with Acetochlor 3.1 + ATZ 2.5, EPA File Symbol 42750-RNI.
- 3. Based on the reviewed acute toxicity studies for EPA Reg. No. 254-485 and the request for a new primary eye irritation study, the acute toxicity profile for Acetochlor 3.1 + ATZ 2.5, EPA File Symbol 42750-RNI is as follows.

Acute oral toxicity	III	Acceptable	Cited MRID 43512602
Acute dermal toxicity	IV	Acceptable	Cited MRID 43512603
Acute inhalation toxicity	Ш	Acceptable	Cited MRID 43512604
Primary eye irritation	Data gap		
Primary skin irritation	IV	Acceptable	Cited MRID 43512606
Dermal sensitization	Positive	Acceptable	Cited MRID 43512607

4. Based on the above, TRB **cannot** support the registration of Acetochlor 3.1 + ATZ 2.5, EPA File Symbol 42750-RNI until a primary eye irritation study is submitted.

DATE OUT: 06 / SEP / 2005

SUBJECT: PRODUCT CHEMISTRY REVIEW OF MP [ ] EP [X]

DP BARCODE No.: D316463 File Symbol No.: 42750-RNI

PRODUCT NAME: Acetochlor 3.1 + ATZ 2.5

COMPANY: Arlbaugh Incorporation

FOOD USE [X] INTEGRATED FORMULATION []

PCC: 080803, 121601; Decision No. 356242

FROM: Shyam Mathur,

Product Chemistry Team Leader

Technical Review Branch/RD (7505C)

TO:

Erik Kraft / Jim Tompkins, RM 25

Herbicide Branch / RD (7505C)

## INTRODUCTION:

The registrant has submitted product chemistry data in support of the "Me-Too" registration application for the proposed end-use product. The submitted product chemistry data was assigned MRID Nos. 465318-01, 465318-02, and 465318-03 for subgroup A & subgroup B respectively. The registrant has submitted CSF for basic formulation (dated 04/13/05) and the product label. The registrant has claimed that the proposed product is substantially similar to the registered product with Reg. No. 524-485. The Technical Review Branch has been asked to evaluate product chemistry data submitted and determine its similarity with the registered product.

#### SUMMARY OF FINDINGS

1. The proposed product contains.

as the active ingredients with product label claims of

33.4% and 26.90% respectively.

- 2. The CSF of basic formulation (dated 04-13-05) is filled out correctly & completely. The nominal concentrations of the active ingredients concur with the product label claim nominal concentrations. The CSF is in compliance with PR Notice 91-2. All the food use inert ingredients in the formulation are cleared by the Agency and have tolerance exemption for food use. The data submitted corresponding to guidelines 830.1550 (product identity & composition) and 830.1750 (certified limits) satisfy the product chemistry data requirements of 40CFR§158.150 & 158.175 respectively [MRID No. 465318-02].
- The data submitted corresponding to guideline 830.1600 (description of materials used to produce the product), 830.1650 (description of formulation process), and 830.1670 (discussion on the formation of impurity) satisfy the data requirements of 40CFR §158.160, §158.165, & §158.167 respectively [MRID No. 465318-02].
- 4. The data cited corresponding to guideline 830.1800 (enforcement analytical method) satisfy the data requirements of 40CFR§158.180. The GC-FID analytical method was used for the determination of active ingredient contents in the proposed product [MRID No. 465318-02].
- The data submitted corresponding to guideline 830 series subgroup B (physical-chemical properties) satisfy the data requirements of 40CFR158.190, except for storage stability and corrosion characteristics studies [MRID No. 465318-03].

DP BARCODE No.: D316463 File Symbol No.: 42750-RNI PRODUCT NAME: Acetochlor 3.1 + ATZ 2.5

6. The basic formulation CSF (dated 4-13-05) of the proposed product contains and has tolerance exemption for food use. In compliance with Agency's policy streated as an active ingredient, if present in the formulation (though it is not required on the label). The registered product also has as its component, but is different than the proposed product.

#### CONCLUSIONS:

The TRB has reviewed the product chemistry data submitted for the proposed end use product and has concluded that:

- The product chemistry data submitted corresponding to guidelines 830 Series Subgroup A & Subgroup B are acceptable, except for one year storage stability (830.6317) and corrosion characteristics (830.6320).
- 2. The CSF for basic formulation (dated 04-13-05) is acceptable.
- 3. The proposed product (File Symbol No. 42750-RNI) was determined not to be substantially similar to the registered product with Reg. 524-485 from product chemistry point of view. The proposed product contains as one of its components which is not the same as present in the registered product. Since the same is considered as equivalent to the active ingredient, both the products must have the same to be substantially similar. For the names of the please refer to Confidential Appendix.
- 4. The registrant is advised to submit the results of one year storage stability (830.6317) and corrosion characteristics (830.6320) studies. It is recommended that the observations be made at 0, 3, 6, 9, & 12 months time period. The studies must be carried out in commercial containers under warehouse conditions.

\*Inert ingredient information may be entitled to confidential treatment\*

# DP BARCODE No.: <u>D316463</u> File Symbol No.: <u>42750-RNI</u> PRODUCT NAME: <u>Acetochlor 3.1 + ATZ 2.5</u>

Product Chemistry Data (Series 830 Subgroup A & Subgroup B)

Subgroup A	Data Required Fulfilled	MRID No.
830.1550, Chemical Identity (Basic CSF)	A	04-13-05
830.1600. Beginning Materials	A	465318-02
830.1650. Formulation Process	A	
830.1670. Discussion of Impurities	A	6 N N
830.1700. Preliminary Analysis	NA	
830.1750. Certified Limits (Basic CSF)	A	04-13-05
830.1800. Enforcement Analytical Method	A	465318-02

DP BARCODE No.: <u>D316463</u> File Symbol No.: <u>42750-RNI</u> PRODUCT NAME: <u>Acetochlor 3.1 + ATZ 2.5</u>

Subgroup B	Data Required Fulfilled	Value or Qualitat. Descrip.	MRID No.
830.6302. Color	A	White	465318-03
830.6303. Physical State	Α	Liquid	4 7 4
830.6304. Odor	A	Paint like	м м м
830.6314. Oxidation/Reduction Action	A	Non-compatible with oxidizing agent. Compatible with water, 10% MAP, kerosene, Fe powder	A1 19 M
830.6315. Flammability	А	> 100°C	
830.6316. Explodability	NA		
830.6317. Storage stability	G		
830.6319. Miscibility	NA		
830.6320. Corrosion Characteristics	G		
830.6321. Dielectric Breakdown Voltage	NA		
830.7000. pH	A	5.06	465318-03
830.7100. Viscosity	A 20°C 40°C	1367.942 cps 196.584 cps	M /8 11
830.7000. Density/Bulk Density	A	1.109 g/ml 20 <sup>0</sup> C	

Explanations: A = The Requirements Were Fulfilled; N = The Requirements Were Not Fulfilled; NA = Not Applicable; G = Data Gap; U = Requires Upgrading; I = Incomplete or In Progress; W = Waived.

DP BARCODE No.: <u>D316463</u> File Symbol No.: <u>42750-RNI</u> PRODUCT NAME: <u>Acetochlor 3.1 + ATZ 2.5</u>

Enforcement analytical method: (MRID No. 465318-02)

## **HPLC Equipment and Parameters**

Instrument: A suitable GC machine equipped with Flame ionization detector (FID)

Column: Column HP-5 MS, 30 m x 0.25 mm id, 0.25 µm

Injection volume: 1 µL

Nitrogen Flow rate: 1.0 ml/min

Detector: FID

Split ratio: 15:1

Internal standard: Benzyl benzoate

Retention times: Atrazine - 4.5 min; Acetochlor - 10.8 min; Benzyl benzoate - 9.5 min

The method was validated for precision, accuracy, and precision.

CONFIDENTIAL APPENDIX
DP BARCODE No.: <u>D316463</u> File Symbol No.: <u>42750-RNI</u> PRODUCT NAME: <u>Acetochlor 3.1 + ATZ 2.5</u>



\*Inert ingredient information may be entitled to confidential treatment\*

CORPORATE OFFICE 121 NE 18th Street Ankeny, IA 50021 515.964.9444 (Phone) 800.247.8013 (Toll Free) 515.964.7813 (Fax)

## ALBAUGH, INC.

MEMAHIS OFFICE 1910 Exerer Poat, Ste. 1 Memphis, TN 38138-2971 901.309 8122 (Phone) 901.309.8530 (Fax)

FEDERAL EXPRESS

P.O. Box 2127 Valdosta, GA 31604-2127

April 13, 2005

Document Processing Desk (REGFEE) Mr. Jim Tompkins (PM 25) Registration Division Office of Pesticide Programs (7504C) U.S. Environmental Protection Agency Crystal Mall 2, Room 266A 1801 S. Bell Street Arlington, VA 22202

RE: Acetochlor 3.1 + ATZ 2.5

Initial application

Dear Mr. Tompkins,

The enclosed submission is Albaugh's initial application to register the above referenced product. Documents enclosed to support this application are detailed on the enclosed transmittal page. This application is being submitted as a "me too" of Monsanto's Harness Xtra 5.6 (EPA Reg. No. 524-485) as stamped approved by the Agency on November 3, 2004.

Albaugh requests that the Agency rely upon acute toxicity studies previously submitted by Albaugh in support of Albaugh's application to register ACETOCHLOR 4.3 + ATZ 1.7. A comparison of Monsanto's Harness Xtra and Harness Xtra 5.6 indicate that there is no significant change in toxicological profile by any route of exposure. We feel that in interest of conserving Agency resources and avoiding needless test animal usage that bridging data for Albaugh's formulations would be appropriate.

Albaugh believes this application should be classified as a R31 – New product, non-fast track with a \$4,000 fee and 10 month response time.

Please call if you have any questions.

Regards,

Morris Gaskins

Registrations Manager

Albaugh, Inc. 229-244-3288



## TRANSMITTAL DOCUMENT

#### Name and address of submitter:

Albaugh, Inc. P.O. Box 2127 Valdosta, GA 31604-2127

Company Official: Morris Gaskins

Telephone: (229) 244-3288

#### Regulatory action for which this package is submitted:

Initial application to register ACETOCHLOR 3.2 + ATZ 2.5

Transmittal Date: April 13, 2005

#### List of items submitted:

- Transmittal page
- Cover letter
- 8570-1 application form
- 8570-34 Certification With Respect to Citation of Data form
- 8570-35 Data Matrix (internal use copy)
- 8570-35 Data Matrix (public file copy)
- 8570-27 Formulators Exemption
- Draft label (5 copies)
- Basic CSF (2 copies)
- Summary of OPPTS 830.1000 Series Product Properties Test Guidelines (3 copies)
- Guidelines 830.1550, 830.1600, 830.1650, 830.1670, 830.1750, 830.1800. Product Identity and Composition, Description of Materials Used to Produce the Product, Description of Formulation Process, Discussion of Formation of Impurities and Certified Limits (3 copies)
- Guidelines 830.6302, 830.6303, 830.6304, 830.6314, 830.6315, 830.7000, 830.7100, 830.7300.
   Physical and Chemical Characteristics (3 copies)

* rease read instruction	s on reverse before cor				7		OPP Identifier Numbe
<b>⊗EPA</b>		United State  Ital Protec  ashington, DC	tion Agency	_	Registrat Amendm Other	1011	
		Applica	tion for Pesticide	- Section	1		
1. Compeny/Product Nu 42750- RNI			2. EPA Prod J. Tompki	uct Manager NS		3. Pr	oposed Classification
4. Company/Product (N ACETOCHLOR 3.1			PM# 23				[V]
Albaugh, Inc. P.O. Box 2127 Valdosta, GA 316		Code)	(b)(i), my pi	No. 524-	nilar or identica	il in co	FIFRA Section 3(c)(3) mposition and labeling
			Section - II	181110		-	
Amendment - Exp  Resubmission in  Notification - Exp	response to Agency let	ter dated	Age *Me	l printed labe ncy letter dat Too" Applica ar - Explain be	ition.		
Material This Product			Section - III				
Hild-Resistant Packaging  Yes  ✓ No  Certification must	Yes  Vas  Vas  Vas  Vas  Vas  Vas  Var  Vas  Val  Vas  Vas  Val  Vas  Vas  Vas	No. per		Yes  No  If "Yes"  No. per			ocify)
submitted Location of Net Conten	ts Information	4. Size(s) Re	tail Container	5. Local	ation of Label Di		
Manner in Which Label	Container Is Affixed to Product	Lithog Paper Stenci	2.5 gl, bulk	Other	On label atta	ched to	container
		Stenci	Section - IV	-			
Contact Point (Comple	te items directly below	for identification	n of individual to be conta	cted, if neces	sary, to process	this ep	plinetion.)
nme forris Gaskins			Title Registrations Manager			Telephone No. (Include Area C 229-244-3288	
	iny knowlingly false or		tion all attachments thereto are ement may be punishable				Date Application Received (Stamped)
Signature	1008/c	1	. Title Registrations Manager				
yped Name /		5	. Date	13/05			54

VLIA	vironmental Protection Agency Weshington, DC 20460 ator's Exemption Statement (40 CFR 152.85)
Applicant's Name and Address	EPA File Symbol/Registration Number
Albaugh Inc. 121 NE 18th St.	42750-appl
Ankeny, IA 50021	Product Name  ACETOCHLOR 3.1 + ATZ 2.5
	Date of Confidential Statement of Formula (EPA Form 8570-4) 4/13/05
As an authorized representative of the applicant	for registration of the product identified above, I certify that:
(1) This product contains the following active	ingredient(s):
acetochlor	
atrazine	
7	
ingredient in the manufacturing, formulati	aragraph (4) is present solely as the result of the use of that active on or repackaging another product which contains that active ingredient, is purchased by us from another producer, and is labeled for at least d to be labeled.
(3) Indicate by checking (A) or (B) below which	ch paragraph applies:
attached to this statement. That formula s name, the source of the active ingredient(s)  (B) The Confidential Statement of Formula	Formula (EPA FORM 8570-4) for the above identified product is tatement indicates, by company name, registration number, and product is listed in paragraph (1).  OR (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is ins the information required on the current CSF.
(4) The following active ingredients in this pro	duct qualify for the formulator's exemption.
	Source
Active Ingredient	Product Name Registration Number
ecetochlor atrazine	
*Product ingredient source in	formation may be entitled to confidential treatment*
i rodaet ingredient deares in	I I I I I I I I I I I I I I I I I I I
	The same of the sa
	the state of the s
ignature // Name an	d Title Date
	kins Registrations Manager 4/13/05

EPA Form 8570-27 (Rev. 8-95)

White - EPA copy Yellow - Appleant copy



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

WASHINGTO	N, D.C. 2046	
Paperwork Reduction Act Notice: The public reporting burden for this collection and 0.25 hours per response for reregistration and special review activities, includin comments regarding burden estimate or any other aspect of this collection of inform Information Management Division (2137), U.S. Environmental Protection Agency, 4 Do not send the completed form to this address.	ig time for reading t nation, including su	he instructions and completing the necessary forms. Send agestions for reducing the burden to: Director, OPPE
Certification with Respec	ct to Citation o	of Data
Applicant's/Registrant's Name, Address, and Telephone Number Albaugh, Inc. 121 NE 18th St. Ankeny, IA 50021 800-247-8013		EPA Registration Number/File Symbol 42750-xx
Active Ingredient(s) and/or representative test compound(s) acetochlor, atrazine		Date 4/13/05
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 15 com	8)	Product Name ACETOCHLOR 3.1 + ATZ 2.5
NOTE: If your product is a 100% repackaging of another purchased EPA-register submit this form. You must submit the Formulator's Exemption Statement (EPA For		for all the same uses on your label, you do not need to
I am responding to a Data-Call-in Notice, and have included with this form a be used for this purpose).	a list of companies	sent offers of compensation (the Data Matrix form should
SECTION I: METHOD OF DATA SUP	PORT (Check one	method only)
I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).	under th	ng the selective method of support (or die-all option e selective method), and have included with this form a ed list of data requirements (the Data Matrix form must be
SECTION II: GENERAL	OFFER TO PAY	
Required if using the cite-all method or when using the cite-all option under the selection.  I hereby offer and agree to pay compansation, to other persons, with regard to	the approval of thi	
SECTION III: CERT	IFICATION	
I certify that this application for registration, this form for reregistration, or the polication for registration, the form for reregistration, or the Data-Call-In response. In indicated in Section I, this application is supported by all data in the Agency's files that substantially similar product, or one or more of the ingredients in this product; and (2) is equirements in effect on the date of approval of this application if the application soughts.  I certify that for each exclusive use study cited in support of this registration he written permission of the original data submitter to cite that study.  I certify that for each study cited in support of this registration or reregistration ubmitter; (b) I have obtained the permission of the original data submitter to use the some pensation have expired for the study; (d) the study is in the public literature; or (e) I flered (I) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c) mount and terms of compensation, if any, to be paid for the use of the study.  I certify that in all instances where an offer of compensation is required, copic coordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be addence to the Agency upon request, I understand that the Agency may initiate action.	addition, if the cite.  (1) concern the prise a type of data that the initial registration, the on that is not an excludy in support of till have notified in writing of all offers to page submitted to the American support of the support of the American support of the Am	all option or cite-all option under the selective method is operties or effects of this product or an identical or twould be required to be submitted under the data ation of a product of identical or similar composition and at I am the original data submitter or that I have obtained dusive use study, either: (a) I am the original data his application; (c) all periods of eligibility for ting the company that submitted the study and have and (ii) to commence negotiations to determine the
IFRA.  I certify that the statements I have made on this form and all attachme nowingly false or misleading statement may be punishable by fine or imprison	nts to it are true,	accurate, and complete. I acknowledge that any
gnature May Asiz	Date 4/13/05	Typed or Printed Name and Title  Morris Gaskins Registrations Manager

EPA Form 8570-34 (9-97) Electronic and Paper versions available. Submit only Paper version.

Furni Approved OMB No. 2070-0060

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, DC 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: 4/13	105		EPA Reg. No./File Syn	nbol 42750-appl	Page 1 of 5
Applicant's/Registrant's			Product:	ETOCHLOR 3.1 + ATA	۲ 2.5
Ingredient: Acetochlor	CAS # 34256-82-1, Atrazine CAS # 1912-24-9				
Guideline Reference	Guideline Study Name	MRID Number	Submitter	Status	Note
			Albaugh	OWN	
			Albaugh	OWN	
					Waiver <sup>2</sup>
			Albaugh	OWN	
			Albaugh	OWN	
	非性的影響等不 医多路管检查性衰竭		W. The second		Not req'd <sup>1</sup>
			Albaugh	OWN	
			Albaugh	OWN	
			Albaugh	OWN	
			Albaugh	OWN	
			Albaugh	OWN	
					Not req'd <sup>1</sup>
			Albaugh	OWN	
			Albaugh	OWN	
			Thu m		Waiver <sup>3</sup>
					In progress
Signature	M-3 /243		Name and Title: Mc	orris Gaskins egistrations Manager	Date 4/13/0

Form Approved OMB No. 2070-0060

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, DC 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date: 4/13/05			EPA Reg. No./File Symbol 42750	appl	Page 2 of 5	
Applicant's / Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021			Product:  ACETOCHLOR 3.1 + ATZ 2.5			
Ingredient: Acetochlor CAS # 1	34256-82-1, Atrazine CAS # 1912-24-9					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
CATALON CONTRACTOR					Waiver <sup>5</sup>	
					In progress	
					Waiver <sup>6</sup>	
			Albaugh	OWN		
			N. Carlotte		Not req'd1	
			Albaugh	OWN		
					Not req'd1	
					Not req'd1	
			Albaugh	OWN		
					Not req'd1	
					Not req'd¹	
				-	Not req'd <sup>1</sup>	
			+		Not req'd1	
Signature	Mar Alo		Name and Title: Morris Gaskins Registrations M	anager	Date 4/13/	

Furm Approved OMB No. 2070-0060

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, DC 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

		DATA MATRIX			
Date: 4/13/05			EPA Reg. No./File Symbol 42	2750-appl	Page 3 of 5
Applicant's/Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021		Product:  ACETOCHLOR 3.1 + ATZ 2.5			
Ingredient: Acetochlor CAS #	34256-82-1, Atrazine CAS # 1912-24-9				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
					Not req'd <sup>1</sup>
					Not req'd <sup>1</sup>
					Not req'd¹
			Albaugh	OWN	See footnote 7
			Albaugh	OWN	See footnote 7
			Albaugh	OWN	See footnote 7
			Albaugh	OWN	See footnote 7
			Albaugh	OWN	See footnote 7
			Albaugh	OWN	See footnote
Signature			Name and Title: Morris Gaskir	ns	Date
EDA Form 0570 25 (0.07) Electronic	c and Paper versions available. Submit only paper	Tho	Registrations Agency Publi		4/13/05

Form Approved OMB No. 2070-0060

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W. WASHINGTON, DC 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

		DATA MATRIX			
Date: 4/13/05			EPA Reg. No./File Symbol 427	50-appl	Page 4 of 5
Applicant's / Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021		Product:  ACETOCHLOR 3.1 + ATZ 2.5			
Ingredient: Acetochlor CAS # 3	34256-82-1, Atrazine CAS # 1912-24-9				
Guideline Reference Number	Guideline Study Name	MRID	Submitter (EPA Co. No.)	Status	Note
Acetochlor generic data requ	irements				
Albaugh satisfies the generic dat	a requirements for Acetochlor under Formul	lator's Exemption			
Atrazine generic data require	ements				
Albaugh satisfies the generic dat	ta requirements for Atrazine under Formulat	or's Exemption			
					-
	0.1				
W. C.					
· I					
Signature	$M_{2}$		Name and Title: Morris Gaskins Registrations M		Date
EPA Form 8570-35 (9-97) Electronic	c and Paper versions available. Submit only paper	er version.	Agency Publ		7/13/0

#### Footnote 1

- 830.1700 Preliminary Analysis
- 830.6313 Stability to Normal and Elevated Temperature, Metals, and Metal Ions
- 830.7050 UV/Visible absorption
- 830.7200 Melting Point/Range
- 830.7220 Boiling Point/Range
- 830,7370 Dissociation Constants in Water
- 830.7550 Partition coefficient
- 830.7560 Partition coefficient
- 830.7570 Partition coefficient
- 830.7840 Water solubility
- 830,7860 Water solubility
- 830,7950 Vapor Pressure

This data is not required for end use products per Product Properties Test Guidelines OPPTS 830.1000 (e)(2)(xi)(B) Table 2

#### Footnote 2

830.1620 Production Process. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 product is formulated. See Guideline 830.1650.

#### Footnote 3

 830.6316 Explodability. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 product is not composed of explosive components and therefore does not exhibit explosive characteristics.

#### Footnote 4

- 830.6317 Storage stability
- 830.6320 Corrosion characteristics

Albaugh is currently conducting combined testing for these guidelines as allowed by OPPTS Product Properties Test Guidelines. Albaugh will submit these studies upon completion of the Storage Stability one year after initiation and requests that a conditional registration be granted prior to submission of the data.

#### Footnote 5

830.6319 Miscibility. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 is not intended to be diluted with oil or other non-polar solvents.

#### Footnote 6

830.6321 Dielectric breakdown voltage. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 is not labeled or intended for use around electrical equipment.

#### Footnote 7

830.1100 through 830.2600 Acute Toxicity. Albaugh submitted a full battery of acute toxicity studies to support the registration for ACETOCHLOR 4.3 + ATZ 1.7 with a similar formulation. Albaugh requests that the Agency rely upon the results of those studies to evaluate this product.

Page 1 of 5

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, DC 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration and special review activities, including time for reading the instructions and completing the necessary forms. Send confirmation including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

4/13/0					1
Applicant's/Registrant's	Name & Address: Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021		Product:	CETOCHLOR 3.1 + ATA	2 2.5
Ingredient: Acetochlor	CAS # 34256-82-1, Atrazine CAS # 1912-24-9				
Guideline Reference	Guideline Study Name	MRID Number	Submitter	Status	Note
830.1550	Product Identity and Composition	With application	Albaugh	OWN	
830.1600	Description of Materials Used to Produce the	With application	Albaugh	OWN	
830.1620	Description of Product Process				Waiver <sup>2</sup>
830.1650	Description of Formulation Process	With application	Albaugh	OWN	
830,1670	Description of Formation of Impurities	With application	Albaugh	OWN	
830.1700	Preliminary Analysis				Not req'd1
830.1750	Certified Limits	With application	Albaugh	OWN	
830.1800	Enforcement Analytical Method	With application	Albaugh	OWN	
830.6302	Color	With application	Albaugh	OWN	
830.6303	Physical State	With application	Albaugh	OWN	
830.6304	Odor	With application	Albaugh	OWN	
830.6313	Stability to Normal and Elevated Temperatures, Metals, and Metal Ions				Not req'd1
830.6314 .	Oxidation/Reduction: Chemical Incompatibility	With application	Albaugh	OWN	
830.6315	Flammability	With application	Albaugh	OWN	
830.6316	Explodability				Waiver <sup>3</sup>
830.6317	Storage Stability				In progress
Signature	Mond Dels		Name and Title: Mr	orris Gaskins egistrations Manager	Date 4/12/0

Form Approved OMB No. 2070-0060

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, DC 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the hurden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Applicant's/Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021			EPA Reg. No./File Symbol 42	Page 2 of 5	
			Product: ACETOCHLOR 3.1 + ATZ 2.5		
Ingredient: Acetochlor CAS #	34256-82-1, Atrazine CAS # 1912-24-9	-			
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6319	Miscibility			5 55 55 55	Waiver <sup>5</sup>
830.6320	Corrosion Characteristics		All I		In progress <sup>4</sup>
830.6321	Dielectric Breakdown Voltage	- Anne			Waiver <sup>6</sup>
830.7000	pH	With application	Albaugh	OWN	1701701
830.7050	UV/Visible Absorption				Not reg'd1
830.7100	Viscosity	With application	Albaugh	OWN	riot reg a
830,7200	Melting Point/Melting Range				Not reg'd1
830.7220	Boiling Point/Boiling Range			,	Not reg'd <sup>1</sup>
830.7300	Density/Relative Density/Bulk Density	With application	Albaugh	OWN	
830.7370	Dissociation Constants in Water				Not reg'd1
830.7550	Partition Coefficient (n-octanol/water), Shake Flask Method				Not reg'd <sup>1</sup>
830.7560	Partition Coefficient (n-octanol/water), Generator Column Method				Not req'd <sup>1</sup>
830.7570	Partition Coefficient (n-octanol/water), Estimation by Liquid Chromatography				Not req'd1
Signature	2 Ay and Paper versions available. Submit only paper version		Name and Title: Morris Gask Registration	277.1-2897	Date #/13/6

form Approved OMB No. 2070-0060

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, DC 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIY

	DATA	MATRIX				
Date: 4/13/55			EPA Reg. No./File Symbol 42750	Page 3 of 5		
Applicant's/Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021  Ingredient: Acetochlor CAS # 34256-82-1, Atrazine CAS # 1912-24-9			Product:  ACETOCHLOR 3.1 + ATZ 2.5			
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
830.7840	Water Solubility: Column Elution Method; Shake Flask Method				Not req'd1	
830.7860	Water Solubility, Generator Column Method				Not req'd1	
830.7950	Vapor Pressure				Not req'd1	
870.1100	Acute Oral Toxicity – Rat		Albaugh	OWN	See footnote	
870.1200	Acute Dermal Toxicity - Rat		Albaugh	OWN	See footnote	
870.1300	Acute Inhalation Toxicity - Rat		Albaugh	OWN	See footnote	
870.2400	Primary Eye Irritation - Rabbit		Albaugh	OWN	See footnote	
870.2500	Primary Dermal Irritation		Albaugh	OWN	See footnote	
870.2600	Dermal Sensitization		Albaugh	OWN	See footnote	
Signature	North Ars		Name and Title: Morris Gaskins Registrations Ma	nager	Date 4/13/	
EPA Form 8570-35 (9-97) Electron	ic and Paper versions available. Submit only paper vers	ion.	Agency Internal	Use Copy	1/10/	

Furm Approved OMB No. 2070-0060

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W. WASHINGTON, DC 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

	D	ATA MATRIX			
Applicant's/Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021		EPA Reg. No./File Symbol 42750-appl		Page 4 of 5	
			Product:  ACETOCHLOR 3.1 + ATZ 2.5		
Ingredient: Acetochlor CAS #	34256-82-1, Atrazine CAS # 1912-24-9				
Guideline Reference Number	Guideline Study Name	MRID	Submitter (EPA Co. No.)	Status	Note
Acetochlor generic data requ	uirements				
Albaugh satisfies the generic dat	ta requirements for Acetochlor under Formula	ator's Exemption			
	1				
Ciamptum			Name and Title: Manie Carline		Date
Signature	Mars /213		Name and Title: Morris Gaskins Registrations I		4/13/0
EPA Form 8570-35 (9-97) Flectron	ic and Paper versions available. Submit only nane	rversion	Agency Inte	ernal Use Conv	1

#### Footnote 1

- 830.1700 Preliminary Analysis
- 830.6313 Stability to Normal and Elevated Temperature, Metals, and Metal Ions
- 830.7050 UV/Visible absorption
- 830.7200 Melting Point/Range
- 830.7220 Boiling Point/Range
- 830,7370 Dissociation Constants in Water
- 830.7550 Partition coefficient
- 830.7560 Partition coefficient
- 830.7570 Partition coefficient
- 830.7840 Water solubility
- 830.7860 Water solubility
- 830.7950 Vapor Pressure

This data is not required for end use products per Product Properties Test Guidelines OPPTS 830.1000 (e)(2)(xi)(B) Table 2

#### Footnote 2

830.1620 Production Process. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 product is formulated. See Guideline 830.1650.

#### Footnote 3

 830.6316 Explodability. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 product is not composed of explosive components and therefore does not exhibit explosive characteristics.

#### Footnote 4

- 830.6317 Storage stability
- 830,6320 Corrosion characteristics

Albaugh is currently conducting combined testing for these guidelines as allowed by OPPTS Product Properties Test Guidelines. Albaugh will submit these studies upon completion of the Storage Stability one year after initiation and requests that a conditional registration be granted prior to submission of the data.

#### Footnote 5

830.6319 Miscibility. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 is not intended to be diluted with oil or other non-polar solvents.

#### Footnote 6

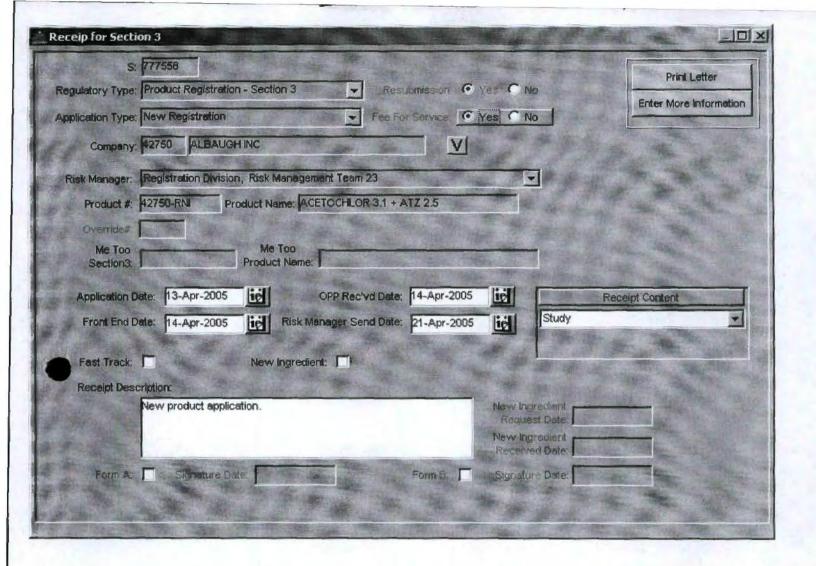
830.6321 Dielectric breakdown voltage. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 is not labeled or intended for use around electrical equipment.

#### Footnote 7

- 830.1100 through 830.2600 Acute Toxicity. Albaugh submitted a full battery of acute toxicity studies to support the registration for ACETOCHLOR 4.3 + ATZ 1.7 with a similar formulation. Albaugh requests that the Agency rely upon the results of those studies to evaluate this product.

# **Fee for Service**

This package includes the following	g for Division
New Registration	□ RD
Amendment	□ AD
Waiver Request and type	□ BPPD 25
□ 100% □ 50% □ IR-4 □Minor □ Fed/sta	ate Risk Mgr.
Receipt Nos. S-	
EPA File Symbol/Reg. No. 42	750 - RNI
Pin-Punch Date: 4/14/05	
Action Code:  Requested: R3/  Granted: R3/  Amount due: \$4,000	Parent/Child Decisions:
☐ Voluntary Payment Request	% Reduction
Reviewer:	Date: 4/2/0





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

April 21, 2005

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

## PLEASE RETURN A COPY OF THIS LETTER WITH PAYMENT

OPP Decision Number: D-356242

EPA File Symbol or Registration Number: 42750-RNI

Product Name: ACETOCHLOR 3.1 + ATZ 2.5

EPA Receipt Date: 14-Apr-2005 EPA Company Number: 42750 Company Name: ALBAUGH INC

MORRIS GASKINS ALBAUGH, INC ALBAUGH INC PO Box 2127 VALDOSTA, GA 31604-2127

SUBJECT: Receipt of Registration Application Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application for registration. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R31

NEW PRODUCT; NON-FAST TRACK (INCLUDES REVIEWS OF PRODUCT CHEMISTRY; ACUTE TOXICITY; PUBLIC HEALTH PEST EFFICACY);

Please remit payment in the amount of: \$ 4,000 to:

By USPS: USEPA Washington Finance Center Pesticide Registration Service Fee PO Box 360277 Pittsburgh, PA 15251 By Courier:

U.S. EPA Washington Finance Center Pesticide Registration Service Fee C/O Mellon Client Service Center 500 Ross Street, Room 670 Box 360277 Pittsburgh, PA 15251-6277

Attn: EPA Module Supervisor Telephone: (412) 236-2294

All payments must be in United States currency by check, bank draft, or money order drawn to the order of the Environmental Protection Agency. To ensure proper credit, please write the OPP DECISION NUMBER on your check, and enclose a copy of this letter with your payment.

You may be eligible for a full or partial waiver of the registration service fee if, for example, you qualify as a small business or are applying for a minor use, or if your application is solely associated with an IR-4 tolerance petition. Please be advised that if you intend to request a waiver, you must do so in writing within 15 days of receipt of this invoice instead of remitting the amount indicated above. OPP will not consider waiver requests after the registration service fee has been paid. Information regarding eligibility and how th request and document a fee waiver is available on the OPP Fee for Service web site at www.epa.gov/pesticides/fees.

Please send Registration Service Fee Waiver requests to:

By USPS:

Document Processing Desk (WAIVER)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460

By Courier:

Document Processing Desk (WAIVER)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Room 266A, Crystal Mall #2
1801 S. Bell St.
Arlington, VA 22202

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman at (703) 305-6249.

Sincerely,

Front End Processing Staff

Information Resources and Services Division

CORPORATE OFFICE 121 NE 18th Street Ankeny, IA 50021 515.964.9444 (Phone) 800.247.8013 (Toll Free)

515,964,7813 (Fax)

## ALBAUGH, INC.

MEMPHIS OFFICE 1910 Exeter Poat, Ste. 1 Memphis, TN 32138-2971 901.309.8/22 (Phone) 901.309.8532 (Fax)

FEDERAL EXPRESS

P.O. Box 2127 Valdosta, GA 31604-2127

April 13, 2005

Document Processing Desk (REGFEE) Mr. Jim Tompkins (PM 25) Registration Division Office of Pesticide Programs (7504C) U.S. Environmental Protection Agency Crystal Mall 2, Room 266A 1801 S. Bell Street Arlington, VA 22202

RE: Acetochlor 3.1 + ATZ 2.5 Initial application

Dear Mr. Tompkins,

The enclosed submission is Albaugh's initial application to register the above referenced product. Documents enclosed to support this application are detailed on the enclosed transmittal page. This application is being submitted as a "me too" of Monsanto's Harness Xtra 5.6 (EPA Reg. No. 524-485) as stamped approved by the Agency on November 3, 2004.

Albaugh requests that the Agency rely upon acute toxicity studies previously submitted by Albaugh in support of Albaugh's application to register ACETOCHLOR 4.3 + ATZ 1.7. A comparison of Monsanto's Harness Xtra and Harness Xtra 5.6 indicate that there is no significant change in toxicological profile by any route of exposure. We feel that in interest of conserving Agency resources and avoiding needless test animal usage that bridging data for Albaugh's formulations would be appropriate.

Albaugh believes this application should be classified as a R31 – New product, non-fast track with a \$4,000 fee and 10 month response time.

Please call if you have any questions.

Regards,

Morris Gaskins

Registrations Manager

Albaugh, Inc. 229-244-3288



## TRANSMITTAL DOCUMENT

#### Name and address of submitter:

Albaugh, Inc. P.O. Box 2127 Valdosta, GA 31604-2127

Company Official: Morris Gaskins

Telephone: (229) 244-3288

Regulatory action for which this package is submitted:

Initial application to register ACETOCHLOR 3.2 + ATZ 2.5

Transmittal Date: April 13, 2005

#### List of items submitted:

- Transmittal page
- Cover letter
- 8570-1 application form
- 8570-34 Certification With Respect to Citation of Data form
- 8570-35 Data Matrix (internal use copy)
- 8570-35 Data Matrix (public file copy)
- 8570-27 Formulators Exemption
- Draft label (5 copies)
- Basic CSF (2 copies)
- Summary of OPPTS 830.1000 Series Product Properties Test Guidelines (3 copies)
- Guidelines 830.1550, 830.1600, 830.1650, 830.1670, 830.1750, 830.1800. Product Identity and Composition, Description of Materials Used to Produce the Product, Description of Formulation Process, Discussion of Formation of Impurities and Certified Limits (3 copies)
- Guidelines 830.6302, 830.6303, 830.6304, 830.6314, 830.6315, 830.7000, 830.7100, 830.7300.
   Physical and Chemical Characteristics (3 copies)

<b>⊗EPA</b>	PEPA Environmental Protection A Weshington, DC 20460			<b>✓</b>	Registrat Amendm Other		OPP Identifier Number
		Application	on for Pesticide -	Section	1		
1. Compeny/Product Numb	101		2. EPA Produc J. Tompkins			3. Pr	roposed Classification
4. Company/Product (Name) ACETOCHLOR 3.1 + ATZ 2.5			PM# 23			7	Julio 1
5. Name and Address of A Albaugh, Inc. P.O. Box 2127 Valdosta, GA 31604		Code)	(b)(i), my pro to: EPA Reg. I	duct is sin	nilar or identic	al in co	FIFRA Section 3(c)(3) imposition and labeling
			Section - II				
Resubmission in res  Notification - Explain	ponse to Agency lette	er dated	Agen Me	printed labe cy letter da Foo" Applic - Explain b	ation.	0	
. Material This Product Wi Child-Resistant Packaging	Il Be Packaged In: Unit Packaging Yes		Section - III  Water Soluble Packagin	ng	2. Type of Co	ntainer Vetal	
Certification must	√ No  If "Yes" Unit Packaging wgt	No. per container	✓ No	per tainer		Plastic Blass Paper Other (S)	pecify)
. Location of Net Contents	Information Container	4. Size(s) Ret	ail Container 2.5 gl, bulk	5. Lo	cation of Label		
. Manner in Which Lebel is	Affixed to Product	Uthogr Paper ( Stencil	aph glued ed	Other			
			Section - IV				·
Contact Point (Complete	items directly below	for identification	of individual to be contain	cted, if nec	ssary, to proce	ss this i	application.)
sme Morris Gaskins			Title Registrations Manager		100	9-244-3	No. (Include Area Code) 288
	y knowlingly false or		tion all attachments thereto are ement may be punishable			te.	6. Date Application Received  4Stamped:
Signature							
Typed Name Morris Gaskins		5	Date 4/	13/05	-		73

United States

SEPA	Environmental Protect Weshington, DC 20 Formulator's Exempti	ion Statement	
Applicant's Name and Address Albaugh Inc.	(40 CFR 152.8	85) EPA File Symbol/Registration Numb 42750-appl	or
121 NE 18th St. Ankeny, IA 50021		Product Name ACETOCHLOR 3.1 + ATZ 2.5	
		Date of Confidential Statement of F	ormula (EPA Form 8570-4)
(1) This product contains acetochlor atrazine  (2) Of these, each active is ingredient in the manuwhich is registered undeach use for which my (3) Indicate by checking (4)  (A) An accurate Confidential Statement of the source of the (B) The Confidential Statement of the complete, current, and	tive of the applicant for registration of the following active ingredient(s):  ingredient listed in paragraph (4) is presented in the following active ingredient (4) is presented in the formulation or repackaging a der FIFRA Section 3, is purchased by the product is proposed to be labeled.  A) or (B) below which paragraph applied dential Statement of Formula (EPA FORment. That formula statement indicates the active ingredient(s) listed in paragraph or the formula (CSF) (EPA Formula accurate and contains the information agredients in this product qualify for the gredients in the gred	esent solely as the result of the canother product which contains us from another producer, and is es:  18M 8570-4) for the above ident, by company name, registration ph (1).  18570-4) referenced above and can required on the current CSF.	use of that active that active ingredient s labeled for at least dified product is n number, and product
	Source		
Active ingredient	Product Name	Regis	tretion Number
*Product ingredient s	source information may be entitle	ed to confidential treatment	
Signature Monb/	Name and Title  Morris Gaskins Registrations Mer	Date	4/13/05

EPA Form 8570-27 (Rev. 8-95)

White - EPA copy Yellow - Applicant copy 74



Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 1,25 hours per response for registration

and 0.25 hours per response for reregistration and special review activities, including to comments regarding burden estimate or any other aspect of this collection of informati Information Management Division (2137), U.S. Environmental Protection Agency, 401 Do not send the completed form to this address.	on, including suggestions for reducing the burden to: Director, OPPE
Certification with Respect	to Citation of Data
Applicant's/Registrant's Name, Address, and Telephone Number Albaugh, Inc. 121 NE 18th St. Ankeny, IA 50021 800-247-8013	EPA Registration Number/File Symbol 42750-xx
Active Ingredient(s) and/or representative test compound(s) acetochlor, atrazine	Date 4/13/05
General Use Pattern(s) (fist all those claimed for this product using 40 CFR Part 158) com	Product Name ACETOCHLOR 3.1 + ATZ 2.5
NOTE: If your product is a 100% repackaging of another purchased EPA-registered submit this form. You must submit the Formulator's Exemption Statement (EPA Form	
I am responding to a Dala-Call-In Notice, and have included with this form a libe used for this purpose).	st of companies sent offers of compensation (the Data Matrix form should
SECTION I: METHOD OF DATA SUPPO	PRT (Check one method only)
I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).	I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).
SECTION II: GENERAL O	FFER TO PAY
I hereby offer and agree to pay compensation, to other persons, with regard to the SECTION III: CERTIF	
I certify that this application for registration, this form for reregistration, or this application for registration, the form for reregistration, or the Data-Call-In response. In a indicated in Section I, this application is supported by all data in the Agency's files that (substantially similar product, or one or more of the Ingredients in this product; and (2) is requirements in effect on the date of approval of this application if the application sought uses.  I certify that for each exclusive use study cited in support of this registration of the written permission of the original data submitter to cite that study.  I certify that for each study cited in support of this registration or reregistration submitter; (b) I have obtained the permission of the original data submitter to use the study compensation have expired for the study; (d) the study is in the public literature; or (e) I is offered (I) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(amount and terms of compensation, if any, to be paid for the use of the study.  I certify that in all instances where an offer of compensation is required, copie accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be evidence to the Agency upon request, I understand that the Agency may initiate action to FIFRA.  I certify that the statements I have made on this form and all attachment knowingly false or misleading statement may be punishable by fine or Imprisonnt	Data-Call-In response is supported by all data submitted or cited in the ddition, if the cite-all option or cite-all option under the selective method is 1) concern the properties or effects of this product or an identical or a type of data that would be required to be submitted under the data the initial registration of a product of identical or similar composition and reregistration, that I am the original data submitter or that I have obtained that is not an exclusive use study, either: (a) I am the original data dy in support of this application; (c) all periods of eligibility for lave notified in writing the company that submitted the study and have all offers to pay compensation and evidence of their delivery in submitted to the Agency upon request. Should I fail to produce such a deny, cancel or suspend the registration of my product in conformity writing to it are true, accurate, and complete. I acknowledge that any
Signature May Dug	Date Typed or Printed Name and Title  Morris Gaskins Registrations Manager

EPA Form 8570-34 (9-97) Electronic and Paper versions available. Submit only Paper version.

Form Approved OMB No. 2070-0060

EPA Reg. No./File Symbol 42750-appl

Page 1 of 5

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Date:

Applicant's/Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021		EPA Reg. No./File Symbol 42/30-appi		rage I or 5	
		Product:  ACETOCHLOR 3.1 + ATZ 2.5			
Ingredient: Acetochlor	CAS # 34256-82-1, Atrazine CAS # 1912-24-9				
Guideline Reference	Guideline Study Name	MRID Number	Submitter	Status	Note
			Albaugh	OWN	400
			Albaugh	OWN	
					Waiver <sup>2</sup>
			Albaugh	OWN	
			Albaugh	OWN	
					Not req'd1
			Albaugh	OWN	
			Albaugh	OWN	
			Albaugh	OWN	
			Albaugh	OWN	
			Albaugh	OWN	
					Not req'd1
			Albaugh	OWN	
			Albaugh	OWN	
					Waiver <sup>3</sup>
	The state of the s				In progress
Signature	Mrs 243		Name and Title: Morris Gaskins Registrations Manager		Date 4/13/00
EPA Form 8570-35 (9-97) E	lectronic and Paper versions available. Submit only paper	version.	Agend	cy Public use Copy	- /

Form Approved OMB No. 2070-0060

er response for registration activities and 0.25 hours per

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

D	AIA MAIRIX				
Applicant's/Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021		EPA Reg. No./File Symbol 42750-appl		Page 2 of 5	
		Product:  ACETOCHLOR 3.1 + ATZ 2.5			
	MPTD Number	Cubmitton	Chat	Tara	
outdance occupy marine	PACE Number	Submitter	Status	Note Waiver <sup>5</sup>	
				In progress <sup>6</sup> Waiver <sup>6</sup>	
		Albaugh	OWN	Vyalver	
				Not reg'd1	
		Albaugh	OWN		
				Not req'd1	
				Not req'd1	
		Albaugh	OWN		
				Not req'd1	
				Not req'd1	
				Not req'd1	
				Not req'd1	
Mas Do		Name and Title: Morris Gaskins Registrations Manager		Date 4/13/	
	Address: Albaugh Inc. 121 NE 18 <sup>th</sup> St.	Address: Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021  34256-82-1, Atrazine CAS # 1912-24-9	EPA Reg. No./File Symbol 42750-  R Address: Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021  34256-82-1, Atrazine CAS # 1912-24-9  Guideline Study Name MRID Number Submitter  Albaugh  Albaugh  Albaugh  Name and Title: Morris Gaskins	Address: Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021  Guideline Study Name  MRID Number  Albaugh  OWN  Albaugh  OWN  Albaugh  OWN  Name and Title: Morris Gaskins	

Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

		DATA MATRIX			
Date: 4/13/05			EPA Reg. No./File Symbol 4275	0-appl	Page 3 of 5
Applicant's/Régistrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021		Product: ACETOCHLOR 3.1 + ATZ 2.5			
	34256-82-1, Atrazine CAS # 1912-24-9				
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
					Not req'd1
					Not req'd1
					Not req'd1
			Albaugh	OWN	See footnote
			Albaugh	OWN	See footnote
			Albaugh	OWN	See footnote
			Albaugh	OWN	See footnote
			Albaugh	OWN	See footnote
			Albaugh	OWN	See footnote
Signature	M 2	71.	Name and Title: Morris Gaskins Registrations Mar	nager	Date
EPA Form 8570-35 (9-97) Electronic	and Paper versions available. Submit only pape	er version.	Agency Public use		4/13/0

Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

· · · · · · · · · · · · · · · · · · ·	DC 20400. E0 not send the form to this ad	ATA MATRIX			-
Date: 4/13/05			EPA Reg. No./File Symbol 427	50-appl	Page 4 of 5
Applicant's/Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021		Product: ACETOCHLO			
Ingredient: Acetochlor CAS # 3425					
Guideline Reference Number G	uideline Study Name	MRID	Submitter (EPA Co. No.)	Status	Note
Acetochlor generic data requiren	nents				
Albaugh satisfies the generic data rec	uirements for Acetochlor under Formula	tor's Exemption			
Atrazine generic data requireme	nts				
Albaugh satisfies the generic data rec	quirements for Atrazine under Formulato	r's Exemption			
					-
44.44					
			24-115		
Signature  Mng  Signature  EPA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only paper version.		Name and Title: Morris Gaskins Registrations M	anager	Date	
EPA Form 8570-35 (9-97) Electronic and	Paper versions available. Submit only paper	version.	Agency Public	c use Copy	4/13/05

# Footnote ACETOCHLOR 3.1 + ATZ 2.5 Data Matrix (page 5)

# Footnote 1

- 830.1700 Preliminary Analysis

- 830.6313 Stability to Normal and Elevated Temperature, Metals, and Metal Ions

830.7050 UV/Visible absorption

830.7200 Melting Point/Range

830.7220 Boiling Point/Range

830,7370 Dissociation Constants in Water

830.7550 Partition coefficient

830,7560 Partition coefficient

830.7570 Partition coefficient

- 830.7840 Water solubility

- 830.7860 Water solubility

- 830,7950 Vapor Pressure



This data is not required for end use products per Product Properties Test Guidelines OPPTS 830.1000 (e)(2)(xi)(8) Table 2

#### Footnote 2

- 830.1620 Production Process . Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 product is formulated. See Guideline 830.1650.

#### Footnote 3

 830.6316 Explodability. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 product is not composed of explosive components and therefore does not exhibit explosive characteristics.

## Footnote 4

- 830.6317 Storage stability
- 830.6320 Corrosion characteristics

Albaugh is currently conducting combined testing for these guidelines as allowed by OPPTS Product Properties Test Guidelines. Albaugh will submit these studies upon completion of the Storage Stability one year after initiation and requests that a conditional registration be granted prior to submission of the data.

#### Footnote 5

- 830.6319 Miscibility. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 is not intended to be diluted with oil or other non-polar solvents.

#### Footnote 6

830.6321 Dielectric breakdown voltage. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 is not labeled or intended for use around electrical equipment.

#### Footnote 7

- 830.1100 through 830.2600 Acute Toxicity. Albaugh submitted a full battery of acute toxicity studies to support the registration for ACETOCHLOR 4.3 + ATZ 1.7 with a similar formulation. Albaugh requests that the Agency rely upon the results of those studies to evaluate this product.

Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIX

Dator

Date: 4/13/0	5		EPA Reg. No./File Syml	bol 42750-appl	Page 1 of 5
Applicant's/Registrant's	Name & Address: Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021	Product:	2 2.5		
Ingredient: Acetochlor	CAS # 34256-82-1, Atrazine CAS # 1912-24-9				-
Guideline Reference	Guideline Study Name	MRID Number	Submitter	Status	Note
830.1550	Product Identity and Composition	With application	Albaugh	OWN	
830.1600	Description of Materials Used to Produce the	With application	Albaugh	OWN	
830.1620	Description of Product Process				Waiver <sup>2</sup>
830.1650	Description of Formulation Process	With application	Albaugh	OWN	
830.1670	Description of Formation of Impurities	With application	Albaugh	OWN	
830.1700	Preliminary Analysis				Not reg'd1
830.1750	Certified Limits	With application	Albaugh	OWN	
830.1800	Enforcement Analytical Method	With application	Albaugh	OWN	
830.6302	Color	With application	Albaugh	OWN	
830.6303	Physical State	With application	Albaugh	OWN	1
830.6304	Odor	With application	Albaugh	OWN	
830.6313	Stability to Normal and Elevated Temperatures, Metals, and Metal Ions				Not req'd <sup>1</sup>
830.6314	Oxidation/Reduction: Chemical Incompatibility	With application	Albaugh	OWN	
830.6315	Flammability	With application	Albaugh	OWN	
830.6316	Explodability				Waiver <sup>3</sup>
830.6317	Storage Stability				In progress <sup>4</sup>
Signature	Mond Dols		Name and Title: Morris Regis	s Gaskins trations Manager	Date 4/26

Form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

	DATA	MATRIX				
Date: 4/13/05			EPA Reg. No./File Symbol 42750	Page 2 of 5		
Applicant's/Registrant's Name & Address:  Albaugh Inc.  121 NE 18 <sup>th</sup> St.  Ankeny, IA 50021			Product:  ACETOCHLOR 3.1 + ATZ 2.5			
Ingredient: Acetochlor CAS # :	34256-82-1, Atrazine CAS # 1912-24-9					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
830.6319	Miscibility				Waiver <sup>5</sup>	
830,6320	Corrosion Characteristics				In progress	
830.6321	Dielectric Breakdown Voltage				Waiver <sup>6</sup>	
830.7000	pH	With application	Albaugh	OWN		
830.7050	UV/Visible Absorption				Not req'd1	
830.7100	Viscosity	With application	Albaugh	OWN		
830.7200	Melting Point/Melting Range				Not req'd1	
830.7220	Boiling Point/Boiling Range				Not req'd1	
830.7300	Density/Relative Density/Bulk Density	With application	Albaugh	OWN		
830,7370	Dissociation Constants in Water				Not req'd1	
830.7550	Partition Coefficient (n-octanol/water), Shake Flask Method				Not req'd1	
830.7560	Partition Coefficient (n-octanol/water), Generator Column Method				Not req'd1	
830.7570	Partition Coefficient (n-octanol/water), Estimation by Liquid Chromatography				Not req'd1	
Signature Mong As			Name and Title: Morris Gaskins Registrations Manager		Date +/13/6	

Agency Internal Use Copy

form Approved OMB No. 2070-0060

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

DATA MATRIY

Date: 4/13/55			EPA Reg. No./File Symbol 4275	0-appi	Page 3 of 5	
			Product: ACETOCHLOR	3.1 + ATZ 2.		
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note	
830.7840	Water Solubility: Column Elution Method; Shake Flask Method				Not req'd1	
830.7860	Water Solubility, Generator Column Method				Not req'd1	
830.7950	Vapor Pressure				Not req'd <sup>1</sup>	
870.1100	Acute Oral Toxicity – Rat		Albaugh	OWN	See footnote 7	
870.1200	Acute Dermal Toxicity - Rat		Albaugh	OWN	See footnote 7	
870.1300	Acute Inhalation Toxicity - Rat		Albaugh	OWN	See footnote 7	
870.2400	Primary Eye Irritation - Rabbit		Albaugh	OWN	See footnote 7	
870.2500	Primary Dermal Irritation		Albaugh	OWN	See footnote 7	
870.2600	Dermal Sensitization		Albaugh	OWN	See footnote 7	
Signature	Nort /218		Name and Title: Morris Gaskins Registrations Mar	nager	Date 4/13/2	

tom	Apr	ro	red	OMB	No.	2070-0060
:						

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137) U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

		DATA MATRIX			
Date: 04/13/05			EPA Reg. No./File Symbol 42750	-appl	Page 4 of 5
Applicant's/Registrant's Name & Address:  Albaugh Inc. 121 NE 18 <sup>th</sup> St. Ankeny, IA 50021		Product: ACETOCHLOR 3.1 + ATZ 2.5			
Ingredient: Acetochlor CAS # :	34256-82-1, Atrazine CAS # 1912-24-9				
Guideline Reference Number	eference Number Guideline Study Name MRID		Submitter (EPA Co. No.)	Status	Note
Acetochlor generic data requirements					
Albaugh satisfies the generic dat	a requirements for Acetochlor under Formula	ator's Exemption			
Signature	Mars /248		Name and Title: Morris Gaskins Registrations Mana	ager	H/13/05

EPA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only paper version.

Agency Internal Use Copy

# Footnote ACETOCHLOR 3.1 + ATZ 2.5 Data Matrix (page 5)

# 

#### Footnote 1

- 830.1700 Preliminary Analysis
- 830.6313 Stability to Normal and Elevated Temperature, Metals, and Metal Ions
- 830.7050 UV/Visible absorption
- 830.7200 Melting Point/Range
- 830.7220 Boiling Point/Range
- 830.7370 Dissociation Constants in Water
- 830.7550 Partition coefficient
- 830.7560 Partition coefficient
- 830.7570 Partition coefficient
- 830.7840 Water solubility
- 830.7860 Water solubility
- 830.7950 Vapor Pressure

This data is not required for end use products per Product Properties Test Guidelines OPPTS 830.1000 (e)(2)(xi)(B) Table 2

#### Footnote 2

830.1620 Production Process. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 product is formulated. See Guideline 830.1650.

#### Footnote 3

 830.6316 Explodability. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 product is not composed of explosive components and therefore does not exhibit explosive characteristics.

#### Footnote 4

- 830.6317 Storage stability
- 830.6320 Corrosion characteristics

Albaugh is currently conducting combined testing for these guidelines as allowed by OPPTS Product Properties Test Guidelines. Albaugh will submit these studies upon completion of the Storage Stability one year after initiation and requests that a conditional registration be granted prior to submission of the data.

#### Footnote 5

- 830.6319 Miscibility. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 is not intended to be diluted with oil or other non-polar solvents.

#### Footnote 6

830.6321 Dielectric breakdown voltage. Albaugh requests a waiver for this data requirement. ACETOCHLOR 3.1 + ATZ 2.5 is not labeled or intended for use around electrical equipment.

#### Footnote 7

 830.1100 through 830.2600 Acute Toxicity. Albaugh submitted a full battery of acute toxicity studies to support the registration for ACETOCHLOR 4.3 + ATZ 1.7 with a similar formulation. Albaugh requests that the Agency rely upon the results of those studies to evaluate this product.

# RESTRICTED USE PESTICIDE

due to ground and surface water concerns and oncogenicity concerns. For retail sale to and use only by Certified Applicators, or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

# ACETOCHLOR 3.1 + ATZ 2.5

Preemergence herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn and Popcorn.

# **ACTIVE INGREDIENTS:\***

Acetochlor, 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide	1%
Atrazine, 2-chloro-4-(ethylamino)-6-(isopropylamino) s-triazine and related triazines	1%
OTHER INGREDIENTS:	7%
TOTAL:	1%

\*Contains 372 grams/litre or 3.1 pounds/gallon of acetochlor and 300 grams/liter or 2.5 pounds/gallon of atrazine and related compounds.

#### CAUTION

# KEEP OUT OF REACH OF CHILDREN

FIRST AID
<ul> <li>Hold eye open and rinse slowly ant gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<ul> <li>Take off contaminated clothing</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control center or doctor for treatment advice.</li> <li>Sensitized persons should avoid further contact and reuse of contaminated clothing.</li> </ul>
<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice</li> </ul>

In case of an emergency involving this product, call CHEMTREC at 1-800-424-9300

EPA Reg. No. 42750-appl

EPA Est. No. 42750-MO-001

**NET CONTENTS:** 

MANUFACTURED BY: Albaugh, Inc. Ankeny, IA 50021

#### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

CAUTION! HARMFUL IF SWALLOWED OR INHALED. CAUSES EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Mixers, Loaders, Applicators and other handlers must wear:

- 1. Long-sleeved shirt and long pants
- 2. Chemical resistant gloves made of such as polyethylene or polyvinyl chloride,
- 3. Shoes plus socks,
- Chemical-resistant apron when mixing/loading, cleaning up spills, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 1.40 CFR 170.240(4)(4-6)1, the handler PPE requirements may be reduced or modified as specified in the WPS.

# USER SAFETY RECOMMENDATIONS

#### USERS SHOULD:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e. well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas maybe hazardous to aquatic organisms in neigh-boring areas. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

See Use restrictions and Tile-Terraced Fields sections for additional specific information.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Read the entire label before using this product. Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be assessed through <a href="https://www.atrazine-watershed.info">www.atrazine-watershed.info</a> or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Albaugh, inc. for a refund.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, are:

- 1. Coveralls
- 2. Chemical resistant gloves such as any waterproof material
- 3. Shoes plus socks.

#### STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Keep container closed to prevent spills or contamination.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that can-not be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

CONTAINER DISPOSAL: Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. (See the individual container label for disposal information.)

[alternate language for refillable/mini bulk or bulk containers]

Instructions for Users: When the container is empty, replace the cap and seal all openings that have been made during usage, and return the container to the point of purchase, or to an alternate location designated by the registrant at the time of purchase of this product. If not returned to the point of purchase or a designated location, triple rinse or pressure wash the empty container and offer it for recycling if available. If not refilled or recycled, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Instructions for Users and Refillers: This container may be refilled only with this pesticide product. Do not reuse this container for any other purpose. Do not transport if this container is damaged or leaking. If the container is damaged or leaking or obsolete, or to obtain information about recycling refillable containers, contact Albaugh Customer Service. Cleaning is not necessary prior to compliance with state and local recommendations.

[alternate language for plastic 1-way containers]

Do not reuse container. Triple rinse container, then puncture and dispose of in sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[alternate language for drums]

Do not reuse container. Return container per the Albaugh container return program. If not returned, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

# GENERAL INFORMATION

This product is recommended for control of yellow nutsedge and many annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. This product alone will not control emerged seedlings. This product may be applied either as a surface application before or after planting or after crop emergence. This product may also be shallowly incorporated prior to planting to blend the herbicide treatment into the upper 1 to 2 inches of soil. Except for minimum or conservation tillage systems, the seedbed should be fine, firm and free of clods and trash.

Read and carefully observe cautionary statements and all other information appearing on the labeling of all products used in mixtures and sequential treatments. Refer to the product labels of herbicides used in tank mixtures with this product to determine the weeds controlled by those products.

NOTE: Use this product for weed control in corn only. CORN (ALL TYPES INCLUDING SWEET CORN), MILO (SORGHUM), OR SOYBEANS CAN BE PLANTED THE YEAR FOLLOWING THE USE OF THIS PRODUCT IF SOYBEANS OR OTHER NONLABELED CROPS ARE TO BE PLANTED THE FOLLOWING YEAR, THERE IS THE POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE.

#### USE RESTRICTIONS

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination. Do not apply to the following soils where depth to ground water is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter; or sandy loans with less than 1 percent organic matter.

This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied within 66 feet of all points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or set-back from runoff points must be planted to a crop or seeded with grass, or other suitable crop.

This product may not be mixed or loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110 percent of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from con-tact with the pad shall have a minimum containment capacity of 100 percent of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

Do not flood irrigate to apply or incorporate this product.

Product must be used in a manner which will prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Do not apply this product through any type of irrigation system.

Disposal of excess pesticide, spray mixtures or rinsate should be according to label use instructions or according to the state Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional office.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:

Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or

snow covered soils.

Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rain-fall has occurred between application and the first irrigation.

Do not apply this product using aerial application equipment.

Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:

Use low pressure application equipment capable of producing a large droplet spray. Do not use nozzles that produce a fine droplet spray. Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.

Keep ground driven spray boom as low as possible above the target surface.

Make application when the wind velocity favors on-target product deposition (approximately 3-10 miles per hour). Do not apply when wind velocity exceeds 15 miles per hour. Avoid application when gusts approach 15 miles per hour.

Low humidity arid high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

Use of this product not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

For field corn forage use, allow 60-day preharvest interval.

Flush sprayer with clean water after use.

When tank mixing or sequentially applying, atrazine or products containing atrazine to corn, the total pounds atrazine applied (pounds active ingredient per acre) must not exceed 2.5 pounds active ingredient per acre.

Tile-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options must be used:

1. Do not apply this product within 66 feet of standpipes in the tile-outletted fields.

Apply this product to the entire tile-outletted field and immediately incorporate it to a depth of 2 to 3 inches in the entire tile-outletted field.

Apply this product to the entire tile-outletted field under a no-till practice only when a high crop residue
management practice is used. High crop residue management practice is described as a crop
management practice where little or no crop residue is removed from the field during or after crop
harvest.

# SOIL TEXTURE

Applicators should evaluate soil conditions carefully to assure that they choose the correct label rate.

The recommended use rates of this product and the other herbicides labeled for use in tank mixtures with this product vary with soil texture. Unless soil texture is specifically named, rate tables through-out this label refer to only three soil textural groups: coarse, medium and fine. The following is a complete listing of soil

textures included in each of these three soil textural groups:

SOIL TEXTURAL GROUP	SOIL TEXTURE
COARSE	sand, loamy sand, sandy loam
MEDIUM	loam, silt loam, silt, sandy clay loam
FINE	Silty clay loam, clay loam, sandy clay, silty clay, clay

Refer to the above table to determine the corresponding soil textural group for the soil to be treated.

# MIXING, SPRAYING AND HANDLING INSTRUCTIONS

NOTE: Direct contact or exposure to this product or spray mixtures of this product should be minimized. The following instructions for transfer, mixing cleaning or repairing equipment should be followed in order to minimize this exposure. Review the protective clothing requirements as listed in the "PRECAUTIONARY STATEMENTS" section of this label (front panel) and do not use this product until you have the necessary protective clothing.

#### 2.5 Gallon Containers

Open pouring from these containers can result in exposure from splashing or spilling. Special care in lifting and pouring are strongly recommended.

#### **Bulk Containers**

Open pouring from these containers can result in exposure from splashing or spilling and is not recommended. This product should be transferred from these containers to the mix or spray tank using pumps or transfer probes. The probe or pump should not be removed from the container or disconnected until the container is emptied and rinsed. Use the pump or probe system to rinse the empty container and transfer the rinsate directly to the mix or spray tank.

#### Equipment Cleaning and Repair

Cleaning and repair of transfer systems and application equipment is a source of exposure to this product. Care should be taken to minimize exposure during cleaning and repair of transfer systems and application equipment. Whenever possible, these systems or equipment should be rinsed before being cleaned or repaired.

When repairs must be made during transfer or application, the equipment should be shut down, and special care taken to avoid contact with the pesticide.

# Sprayer Compatibility

Always predetermine the compatibility of this product or labeled tank mixtures of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the "STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST" section in this label to determine the compatibility of this product and the labeled tank mixtures recommended for use with sprayable fluid fertilizer carrier.

Mix this product or labeled tank mixture of this product with the appropriate carrier as follows:

- 1. Place a 20 to 35 mesh screen or wetting basket over filling port.
- 2. Through the screen, fill the sprayer tank one-half full with the appropriate carrier.
- If a compatibility agent is necessary to improve mixing or to prevent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only

compatibility agents cleared by FDA for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent label. Check for adequate agitation.

4. If a wettable powder or dry flowable formulation is used, make a slurry with water and add it slowly

through the screen into the tank. Continue agitation.

If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when flow-able is pre-mixed one part flowable with one part water and added to the tank in diluted form.

6. Add this product slowly through the screen into the tank. Mixing and compatibility maybe improved when

this product is prediluted with two parts of water and added to the tank in diluted form.

Complete filling the sprayer tank with carrier. If a Roundup" agricultural herbicide or Gramoxone" Extra
is used, add the required amount near the end of the filling process. Remove hose from tank immediately
after filling to avoid siphoning back into the carrier source.

Maintain good agitation at all times until the contents of the tank are sprayed.

NOTE: If spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. Check for even distribution of spray droplets. To reduce loss of the chemical due to drift of a fine mist, apply at nozzle pressures below 40 psi.

# STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

Herbicides may not always mix evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This may be due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential. The test follows:

#### A. Materials Required For a Compatibility Test

1. Two one-quart jars with lid or stopper (marked "with" and "with-out").

TEAspoons (for a more exacting test, a five to ten milliliter (ml.) pipette or graduated cylinder is desirable).

3. Sprayable fluid fertilizer to be tested.

4. The herbicide chemicals to be mixed.

A compatibility agent (the purpose of the adjuvant is to help keep the fertilizer and crop protection chemical in suspension, if this assistance is needed).

#### B. Procedure

1. Add one pint of the sprayable fluid fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".

	Liquid Fertilizer Quart Jars.
WITH	WITHOUT

2. To the jar marked "with", add 1/4 TEAspoon or 1.2 milliliters of a suitable compatibility agent; shake gently for five to ten seconds to mix. (1/4 Teaspoon in one pint is the equivalent of two pints per 100 gallons of liquid fertilizer.)

Ad	o jar marked "With" d Compatibility Agent and Shake to Mix
WITH	WITHOUT

3. To each jar add the appropriate amount of herbicide(s). If more than one is used, add them separately with the wettable powders or dry flowables added first, flowables second and liquid last. Shake gently five to ten seconds after each addition.

	e(s) To Both Jars ake to Mix.
WITH	WITHOUT

			Amount to Be Added Per Pint of Sprayable Fluid Fertilizer (Assuming Volume is 25 gal/A)
HERBICIDE	RATE/Acre		Level TEAspoons
Wettable Powders	1 pound	=	1.5
	2 pounds	=	3.0
Or	3 pounds	= .	4.5
	4 pounds	=	6.0
Dry Flowables	5 pounds	=	7.5

HERBICIDE	RATE/Acre		Level TEAspoons	M	lilliliters
Emulsifiable Concentrates	1 pint	=	0.5	or	2.4
Or	1 quart	=	1.0	or	4.7
Flowables	2 quarts	=	2.0	or	9.5
Or	3 quarts	=	3.0	or	14.2
Liquids	1 gallon	=	4.0	or	19.0
Or Solutions	5 quarts	=	5.0	or	23.8

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide rate, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 TEAspoon or 1.2 milliliters, three pints 3/8 TEAspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer

# C. Observations and Decisions

- 1. If the herbicide(s) and the sprayable fluid fertilizer are compatible.
- 2. If a compatibility agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge,

gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicides) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. An emulsifiable concentrate normally will go to the top after standing; wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the herbicide(s) is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the premixing. If it is not compatible without the compatibility agent. The herbicide(s) should be premixed with water before adding to the spray tank

#### APPLICATION SYSTEMS

#### Ground Broadcast Treatment

Apply this product and the labeled tank mixtures in 10 or more gallons of solution per acre using broad-cast boom equipment. The carrier may be either water or sprayable fluid fertilizer as specified for the crop to be treated in the "DIRECTIONS FOR USE" section of this label. Do not apply during periods of gusty winds, when winds are in excess of 15 miles per hour or when other conditions favoring drift exist.

#### Ground Band Treatment

Apply a broadcast equivalent rate and volume per acre. To determine these:

Band width in inches		Broadcast RATE		Band RATE per
Row width in inches	X	Per acre	2	acre
		Broadcast RATE		Daniel VOLUME
Band width in inches		DIOBUCASI RATE		Band VOLUME per

#### Application with dry bulk fertilizer

The herbicide-fertilizer impregnation process (In-Plant and On-Board systems) must be completed only by commercial fertilizer or chemical dealerships properly equipped for this procedure. Contact Monsanto Company for additional information regarding recommended equipment and methods for herbicide-fertilizer impregnation applications.

Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product plus atrazine on corn. This product and these tank mixtures most be applied with 200 to 450 pounds of dry bulk fertilizer per acre and shallowly incorporated within 14 days prior to planting. On medium and fine-textured soils in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional tillage situations, applications can be made up to 30 days before planting to allow moisture to move the herbicide-fertilizer mixture into the soil. On coarse-textured soils, applications can be made up to 14 days prior to planting. The herbicide must be applied as recommended in this label for the crop, weed and soil type treated. Refer to the table for broadcast rate per acre to deter-mine the recommended rate per acre for the herbicide treatment to be applied.

Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited. No more than 500 tons of bulk fertilizer can be impregnated per day. No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.

The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the use (applicator) of the dry bulk fertilizer that:

- · Applicators must wear long-sleeved shirt, long pants, shoes plus socks
- Do not enter or allow others to enter the treated areas (except those involving watering) until the watering-in is complete and the surface is dry.

The following table provides a reference to determine the amount of LIQUID herbicide to be mixed per ton of dry bulk fertilizer for a range of herbicide recommendations for fertilizer rates per acre:

Fertilizer Rate	Acres Covered	RECOMMENDED	QUARTS OF LIQUID	HERBICIDE/ACRE
(pounds/Acre)	(per ton)	1.4	1.8	2.3
		(quarts of I	nerbicide/Ton Dry Bul	k Fertilizer)
200	10.0	14.0	18.0	23.0
250	8.0	11.2	14.4	18.6
300	6.7	9.4	12.0	15.5
350	5.7	8.0	10.3	13.3
400	5.0	7.0	9.0	11.7
450	4.5	6.2	8.0	10.4

To determine the amount of herbicide needed for rates not included in the preceding table, use the following formula:

Recommended Herbicide Rate

Quarts/Acre X 2000	=	Quarts of herbicide
Pounds Fertilizer/Acre		per ton of dry bulk fertilizer

With the In-Plant system, mix and blend the dry fertilizer and herbicide mixture in a closed rotary-drum type mixture allowing sufficient time to ensure uniform coverage. Use at least one ton of dry fertilizer per mixing operation. Inject the herbicide into the drum over a minimum of a 2-minute period and allow at least 2 additional minutes mixing time to ensure uniformity. The nozzle used to spray the herbicide treatment must be placed inside the mixer to provide uniform spray coverage of the tumbling fertilizer.

If the dry fertilizer used has inadequate absorptive capacity, use a higher absorptive material such as Agsorb<sup>TM</sup>, MP-79<sup>TM</sup> or Micro-cel<sup>TM</sup> E, to provide a free-flowing mixture. Contact Monsanto Company for specific guidelines with regard to the sequence of addition for the various components and the amount of drying agent to add to pro-vide a free-flowing mixture.

The following table provides a partial list of dry fertilizers which may be impregnated with this product.

Ammonium sulfate	21-0-0
Ammonium phosphate-sulfate	16-20-0
Diammonium phosphate	18-46-0
Potassium chloride	0-0-60
Potassium sulfate	0-0-52
*Urea	46-0-0

<sup>\*</sup>Some ureas may be phytotoxic when applied on corn. Use only ureas known to be safe to corn.

NOTE: DO NOT impregnate this product or tank mixtures of this product with other herbicides on fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate. Spread the herbicide-dry fertilizer mixture uniformly with a properly calibrated applicator: dribble, pneumatic (air flow) or spin. When using spin applicators, fertilizers impregnated with this product or tank mixtures of this product with other herbicides must be spread at half-rate and overlapped 100 percent to obtain full rate and uniform distribution. Non-uniform spreading of the fertilizer-herbicide mixture may result in unsatisfactory weed control or crop injury.

# APPLICATION TIMING AND METHODS

The maximum total per crop season of this product is 3.8 quarts.

# Early Preplant Surface Application

This product and some labeled tank mixtures of this product may be applied in no-till and other conservation tillage systems before weeds emerge and up to 45 days before planting field corn or silage com. Split applications can be made 30 to 45 days prior to planting with 60 percent of the recommended broad-cast rate applied initially and the remaining 40 percent applied at planting. Applications made less than 30 days prior to planting can be made either as a split or as a single application. If weeds are pre-sent at the time of application, apply this product in tank mixture with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

# Preplant Incorporation Application

This product and many of the labeled tank mixtures may be mixed into the soil using shallow incorporation equipment any time within 14 days prior to planting. Apply the recommended treatment rate to the soil surface as a broadcast application. Either existing soil moisture or subsequent precipitation or irrigation is required to bring incorporated herbicide treatments into contact with germinating weed seedlings. If weeds emerge after treatment, rotary hoe or shallowly cultivate immediately to improve performance.

Shallowly incorporate the treatment into the upper 1 to 2 inches of the soil. Equipment should be operated at manufacturer's designed speed for incorporation to ensure adequate mixing and distribution of the herbicide treatment in the soil. Equipment design including any drag attachments must be adequate to avoid soil ridging which may result in streaked or reduced weed control. Soil conditions, including moisture content and crop residue levels, must be suitable to allow thorough and uniform mixing with the equipment used for 1-pass incorporation.

#### Preemergence Surface Application

This product and all labeled tank mixtures may be applied to the soil surface after planting and prior to either crop or weed emergence. Apply within 5 days of last preplant tillage. If weeds emerge after treatment, or if treatment is applied more than 5 days after last preplant tillage, rotary hoe or shallowly cultivate immediately to improve performance. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone. The amount of precipitation or overhead sprinkler irrigation required depends on existing soil mixture, soil type and percent organic matter content, but 1/3 to 3/4 inch is normally adequate. Performance is improved when moisture is received within 7 days after application and prior to weed emergence. High intensity or excessive rainfall or excessive irrigation after application may reduce control.

# Postemergence Surface Application

This product and certain tank-mixtures may be applied postemergence until corn reaches 11 inches in height. Application must be made prior to the 2-leaf grass stage or in a tank-mixture that controls emerged weeds. Read and follow all restrictions and directions on tank-mix product labels. Refer to the specific treatment intended in the "DIRECTIONS FOR USE" section of the label to determine if postemergence applications to corn are recommended and determine the proper weed and corn growth stage limitations. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone to control unemerged weeds. The amount of precipitation or irrigation required depends on existing soil moisture, soil type and percent organic matter content, but 1/4 to 3/4 inch is normally adequate. If weeds emerge after treatment, rotary hoe or shallowly cultivate to improve performance.

DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

#### Cultivation Information

Delay cultivation after application for as long as possible unless weeds or grasses emerge. Shallowly cultivate or rotary hoe immediately if weeds or grass emerge. If cultivation is necessary because of soil crusting or compaction, set equipment shallow and minimize lateral soil movement to avoid dilution or displacement of the herbicide treatment. If a band application is used and weeds have emerged in the treated band, set cultivator to throw soil into the row covering the band.

#### WEEDS CONTROLLED

When applied as directed under conditions described, this product will CONTROL the following weeds:

# ANNUAL GRASSES CONTROLLED

Barnyardgrass Echinocloa crus-galli

Crabgrass Digitaria ischaemum Digitaria sanguinalis

Foxtail, giant Setaria faberi

Foxtail: green, robust purple, robust white Setaria viridis

Foxtail, yellow Setaria lutescens

Goosegrass Eleusine indica

Oat, wild Avena fatua

Panicum, browntop Panicum fasciculatum Panicum, fall Panicum dichotomiflorum

Rice, red Oryza sativa

Signalgrass, broadleaf Brachiaria platyphylla

Sprangletop, red Leptochloa filiformis

Wheat, volunteer Triticum aestivum

Witchgrass Panicum capillare

# ANNUAL BROADLEAVES CONTROLLED

Beggarweed, Florida Desmodium tortuosum

Carpetweed Mollugo verticillata

Cocklebur\*
Xanthium strumarium

Galinsoga Galinsoga spp.

Groundcherry, annual Physalis spp.

Groundcherry, cutleaf Physalis angulata

Henbit Lamium amplexicaule

Jimsonweed Datura stramonium

Kochia\*\* Kochia scoparia

Lambsquarters Chenopodium album

Morningglory, annual\* Ipomoea purpurea Mustard Brassica spp.

Nightshade, black Solanurn nigrum

Nightshade, hairy Solanum sarrachoides

Pigweed, Carelessweed Amaranthus spp.

Purslane Portulaca oleracea

Pusley, Florida Richardia scabra

Ragweed, common Ambrosia antemisiifolia

Sida, prickly; Teaweed Side spinosa

Smartweed Polygonum pensylvanicum Polygonum persicaria

Velvetleaf, Buttonweed\* Abutilon theophrasti

Waterhemp Amaranthus tuberculatus

# SEDGE

Nutsedge, yellow\* Cyperus esculentus

\*Preplant incorporate for control.

# ANNUAL GRASSES PARTIALLY CONTROLLED

When applied immediately after planting and within 5 days of last tillage, this product at a rate of 2.3 to 2.7 quarts per acre on a broadcast basis will reduce competition from the following HARD-TO-CONTROL weeds.

Cupgrass, woolly Enochloa villosa

Johnsongrass, seedling Sorghum halepense Millet, proso Panicum miliaceum

Panicum, Texas Panicum texanum

Sandbur, Grassbur Cenchrus incertus

Shattercane, wildcane Sorghum bicolor

# ANNUAL BROADLEAVES PARTIALLY CONTROLLED

Ragweed, giant Ambrosia trifida

Sicklepod
Cassia obtusifolia

Sunflower, common Helianthus annuus

NOTE: For hard-to-control weeds, additional amounts of Harness herbicide and/or atrazine may be added to the recommended treatment rates for this product to provide improved control. For more consistent control of common cocklebur, annual morningglory or velvetleaf, additional atrazine may be applied so that the total atrazine rate is at least 1.5 quarts per acre on medium-textured soil with less than 3 percent organic matter, and 1.5 to 2 quarts on medium- and fine-textured soils with 3 percent or greater organic matter content. For more consistent control of woolly cupgrass additional Harness may be applied so that the total acetochlor rate is 3.0 pounds per acre. The following table shows the amounts of Harness and/or atrazine that can be added to specific treatment rates of this product.

The maximum atrazine broadcast application rates for corn:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient per acre broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds active ingredient per acre per calendar year.
- Apply a maximum of 2.0 pounds active ingredient per acre as a single preemergence application on soils that are not highly erodible or on highly erodible soils (as defined by the Natural Resources Conservation Service) if at least 30 percent of the soil is covered with plant residues.
- Apply a maximum of 1.6 pounds active ingredient per acre as a single preemergence application on highly erodible soils (as defined by the Natural Resources Conservation Service) if <30 percent of the surface is covered with plant residues; or 2.0 pounds active ingredient per acre if only applied postemergence.

Do not use more than 2.7 quarts of this product per acre per calendar year. APPLICATION RATES:

RECOMMENDED RATE	PRODUCT ADDITION (maximum rate)	
ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ACETOCHLOR 7E (pints)	ATRAZINE (quarts)
1.4	2.0	1.1
1.8	1.8	0.8
2.3	1.3	0.5

#### CONSERVATION OR MINIMUM TILLAGE SYSTEMS

NOTE: Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications, which are not consistent with recommendations in this label, may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS AND METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

# Tank Mixtures At-Planting Applications

The tank mix recommendations in the Conventional Tillage Section of this label may also be followed when using Conservation or Minimum Tillage Systems. Follow all label precautions, directions and restrictions of tank mix partners.

When applied as directed under the conditions described, the recommended tank mixtures control many emerged annual weeds, suppress many emerged perennial weeds and give preemergence control of many annual grasses and weeds when corn will be planted directly into a cover crop, established sod or in previous crop residues. These tank mixtures will not control regrowth from perennial weeds.

#### DO NOT APPLY BY AIR.

Refer to specific product labels for crop rotation restrictions and precautionary statements of all products used in these tank mixtures.

# Additional Preemergence Control

ACETOCHLOR 3.1 + ATZ 2.5 and tank mixtures with Princep™ or Pursuit can be tank-mixed with a Roundup agricultural herbicide, Gramoxone Extra and/or 2,4-D. Refer to specific sections for detailed instructions for tank mixes with Princep or Pursuit.

ACETOCHLOR 3.1 + ATZ 2.5 may be tank-mixed with Princep and a Roundup agricultural herbicide, Gramoxone Extra and/or 2,4-D. Apply the recommended tank mixtures with a Roundup agricultural herbicide or 2,4-D (amine or low volatile ester) in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre, or the tank mixtures with Gramoxone Extra in 20 to 60 gallons of water or clear liquid fertilizer per acre immediately before, during or after planting, but BEFORE CROP EMERGENCE. As density of stubble, crop residue or weeds increase, spray gallonage and rate should be increased within the recommended ranges to ensure complete coverage. In the absence of emerged vegetation, delete the Roundup agricultural herbicide, Gramoxone Extra or 2,4-D portion of these tank mixtures.

# Control or Suppression of Emerged Weeds

ATTENTION: AVOID DRIFT--EXTREME CARE MUST BE USED WHEN APPLYING THESE TANK MIXTURES TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS. Do not allow spray mist to drift

since even minute quantities of spray can cause severe damage or destruction to nearby crops, plants or other areas on which treatment is not intended. Do not apply when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.

Roundup WeatherMAX<sup>TM</sup> Herbicide

#### Annual Weeds

Apply Roundup WeatherMAX herbicide, or other Roundup agricultural herbicides, in these tank mixtures at the proper rate for the weed per the label instructions.

#### Perennial Weeds

At normal application dates in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. Use of 1.3 to 2.7 quarts of Roundup WeatherMAX herbicide per acre, or equivalent rates of other Roundup agricultural herbicides, in the recommended mixtures under these conditions provides top kill and reduces competition from many emerged perennial grasses and broadleaf weeds.

USE OF THIS MIXTURE FOR BERMUDAGRASS OR JOHNSONGRASS CONTROL IS NOT RECOMMENDED.

NOTE: When using these tank mixtures, do not exceed 2.7 quarts of Roundup WeatherMAX herbicide per acre.

#### Ammonium Sulfate

The addition of ammonium sulfate in the spray solution may increase the performance of Roundup agricultural herbicide tank mixtures on emerged annual weeds under adverse growing conditions. When using ammonium sulfate, add 2 percent dry ammonium sulfate by weight or 17 pounds per 100 gallons of water. Ammonium sulfate should be added to the water in the spray tank and completely dissolved prior to adding the herbicide or surfactant. Do not mix ammonium sulfate in fluid fertilizer solutions. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet lines. Nozzle tip plugging may result from the use of low quality ammonium sulfate. To determine quality, perform a jar test by adding 113 cup of ammonium sulfate to 1 gallon of water and agitate for one minute. If undissolved sediment is observed, predissolve the ammonium sulfate in water and filter prior to adding to the spray tank.

#### Surfactants

Nonionic surfactants that are labeled for use with herbicides may be used with some Roundup agricultural herbicides check specific label for restrictions. Do not reduce rates of Roundup agricultural herbicides when adding surfactant. Use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants that contain at least 50 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 50 percent active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

#### Gramoxone Extra

When used as directed, Gramoxone Extra in a labeled tank mixture controls many emerged annual weeds and suppresses many emerged perennial weeds.

#### **Broadcast Treatment**

Apply 1.5 to 3 pints of Gramoxone Extra per acre in the recommended tank mixtures immediately before, during or after planting but BEFORE CROP EMERGENCE. Use 2 to 2.5 pints when weeds are 3 to 6 inches tall. Use 2.5 to 3 pints when weeds are 6 inches tall. This mixture may not control weeds taller than 6 inches. As density of stubble, crop residue or weeds increases, spray gallonage should be increased within the recommended range for complete coverage. Add a nonionic spreader surfactant (approved for use on crops) containing at least 75 percent surfactant active agent at 8 ounces per 100 gallons of diluted spray. REFER TO THE GRAMOXONE EXTRA LABEL FOR PRECAUTIONARY STATEMENTS.

# 2,4-D

When used as directed, 2,4-D in labeled tank mixtures controls many emerged annual and perennial broadleaf weeds. For emerged weeds controlled, see the "WEEDS CONTROLLED" section of the label for 2,4-D.

#### **Broadcast Treatment**

Apply 1 to 2 pints of 2,4-D (amine or low-volatile ester) in the recommended tank mixtures. Applications should be made 7 to 14 days before planting or 3 to 5 days after planting but BEFORE CORN EMERGES. As density of stubble, crop residue or weeds increase, spray gallonage should be increased within the recommended range for complete coverage.

DO NOT use 2,4-D on light, sandy soils, or where soil moisture is inadequate for normal weed growth.

# Early Preplant Application

If emerged weeds are present at the time of treatment, a Roundup agricultural herbicide, Gramoxone Extra or 2,4-D should be added to this product according to the directions for use on their respective product labels. If unsatisfactory weed control occurs (due to excessively dry or excessively wet conditions) following the earlier application, a postemergence application of an appropriate labeled grass and/or broadleaf weed herbicide may be used. If a postemergence treatment includes the herbicide used early preplant, do not exceed the labeled rate for corn on a given soil texture. Observe all precautions and limitations on the labels for ACETOCHLOR 3.1 + ATZ 2.5, Roundup agricultural herbicides, Gramoxone Extra, 2,4-D and other postemergence herbicides before use of these products.

DO NOT apply tank mixtures containing a Roundup agricultural herbicide, Gramoxone Extra or other contact herbicides by air.

#### ACETOCHLOR 3.1 + ATZ 2.5

# For Use in Early Preplant

This product, when applied in a single application or split application (alone or in a tank-mix combination with Princep section 12.11) or as a sequential application to Princep in early preplant programs will provide preemergence control or reduced competition of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. If weeds are emerged at time of application, apply a labeled contact herbicide with this product. Observe the directions for use, precautions and restrictions on the label of the contact herbicide.

Approved Application Systems Ground--Broadcast boom Dry Bulk Fertilizer Impregnation

Single application

Application of this product should be made less than 30 days before planting but prior to weed emergence. On coarse-textured soils applications should not be made more than 2 weeks prior to planting.

Split application

Apply 60 percent of the recommended rate as a split application prior to weed emergence and no more than 45 days prior to planting and the remaining 40 percent at or immediately following planting but before crop emergence.

See the following table for recommended broadcast rates per acre for single and split applications.

#### APPLICATION RATES

SOIL TEXTURAL GROUP	BROADCAST RATE PER ACRE [ACETOCHLOR 3.1 + ATZ 2.5)* (quarts)	
Coarse	1.7 to 2.3	
Medium	2.3 to 3.0	
Fine	2.3 to 3.0	

<sup>\*</sup>Use the higher rate in the recommended range in areas of heavy weed infestation.

This product may also be tank mixed with 1 to 1.25 quarts per acre of Princep to provide improved control of fall panicum and crabgrass.

NOTE: Do not exceed a total of 1.6 pounds of atrazine per acre on highly erodible soils with less than 30 percent plant residue cover.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

Sequential application

Application of this product following Princep (See section 12.11) should be utilized for the control of fall panicum, crabgrass or broadleaf signal grass. Apply 1 to 1.25 quarts per acre of Princep prior to weed emergence and no more than 45 days prior to planting. At or immediately following planting, but before crop emergence, apply the recommended rate of this product.

Following application of Princep see the following table for recommended rates.

# **APPLICATION RATES**

LO		
	BROADCAST RATE PER ACRE	
SOIL TEXTURAL	ACETOCHLOR 3.1 + ATZ 2.5 * (quarts)	
GROUP		
Coarse	1./	
Medium	2.3	
Fine	_2.3 to 3.0	

<sup>\*</sup>Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: Do not exceed a total of 1.6 pounds of atrazine per acre on highly erodible soils with less than 30 percent plant residue cover.

When using Princep 90 DF use equivalent rates. One quart of Princep 4L equals 1.1 pounds of Princep 90 DF.

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

#### CONVENTIONAL TILLAGE

NOTE: Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications that are not consistent with recommendations in this label may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH, sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS and METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

#### ACETOCHLOR 3.1 + ATZ 2.5

Apply this product in water or sprayable fluid fertilizer solution.

APPROVED APPLICATION SYSTEMS Ground—Broadcast boom; banded Dry bulk fertilizer impregnation

# APPROVED APPLICATION METHODS

Preplant Incorporated; Preemergence Surface: Postemergence Surface
Apply this product before weeds reach the 2-leaf stage and the corn is no more than 11 inches in height.

#### APPLICATION RATES:

	BROADCAST RATE PER ACRE			
SOIL TEXTURE	Less than 3% organic matter (quarts)			
Coarse	1.4	1.7		
Medium	1.7 to 2.4	2,3 to 2.6		
Fine	2.3 to 2.6	2.3 to 3.0		

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Roundup WeatherMAX on Roundup Ready® Corn and Roundup Ready Corn 2

This program may be used preemergence and postemergence to Roundup Ready Corn and Roundup Ready Corn 2 until the corn reaches 11 inches in height. Refer to the Roundup WeatherMAX or other Roundup agricultural herbicide labels for specific weeds controlled postemergence.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN THE ROUNDUP READY GENE.

Approved Application Systems Ground—Broadcast boom

Approved Application Methods

Preemergence Surface

Sequential Program: This product may be applied preemergence to Roundup Ready Corn or Roundup Ready Corn 2 at the Roundup Ready Rate of 1.5 quarts per acre in a planned preemergence followed by Roundup agricultural herbicide postemergence sequential program.

Postemergence Surface

This product is applied postemergence to Roundup Ready Corn or Roundup Ready Corn 2 from seedling emergence until the corn is 11 inches in height. The Roundup Ready rate for this product is 1.5 quarts per acre. Labeled use rates for this tank-mix are defined in the table below. Use the higher rate on larger weeds and where heavy weed infestations exist. This tank mix should be applied when weeds are 2 to 4 inches in height and before the weed height and/or density become competitive with the crop.

For difficult to control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signalgrass and Pennsylvania smartweed use the higher rate of Roundup WeatherMAX or equivalent rates of other Roundup agricultural herbicides.

For mixing instructions, see the "MIXING, SPRAYING AND HANDLING" section of this label.

ROUNDUP READY RATE - ACETOCHLOR 3.1 + ATZ 2.5 at 1.5 quarts per acre

Application Rates (minimum and maximum range)

SOIL TEXTURE	BROADCAST RATE PER ACRE		
	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ROUNDUP WEATHERMAX (ounces)	
Coarse	1.0 to 2.9	16 to 22	
Medium	1.0 to 3.7	16 to 22	
Fine	1.0 to 3.7	16 to 22	

# ACETOCHLOR 3.1 + ATZ 2.5 plus Accent

Apply this tank mixture in water after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Accent herbicide label for specific weeds controlled postemergence.

Approved Application Systems Ground—Broadcast boom; banded

# APPROVED APPLICATION METHODS

Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and until grasses are 3 inches in height. Always add a nonionic surfactant at 0.25% v/v. Addition of Banvel or Permit will improve performance on broadleaf weeds.

# APPLICATION RATES:

SOIL TEXTURE	BROADCAST RATE PER ACRE				
	Less than 3% Organic Matter		3% or more Organic Matter		
	ACETOCHLOR 3.1	ACCENT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ACCENT (ounces)	
Coarse *	1.4	1 /2 to 2/3	1.7	1/2 to 2/3	
Medium	1.7 to 2.3	1/2 to 2/3	2.3	1/2 to 2/3	
Fine	2.3	1/2 to 2/3	2.3 to 3.0	1/2 to 2/3	

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Balance™ PRO

For Use In Field Corn And Silage Corn

Approved Application Systems Ground – Broadcast boom; banded.

Approved Application Method

Preemergence Surface

Balance PRO is not registered in all states. Follow all Restrictions and Precautions on the Balance PRO label including planting depth, environmental precautions, and soil type restrictions.

Follow the Balance PRO Technical Bulletins, 24(c) labels and 2(ee) recommendations for additional use rate restrictions based on soil textures and depth to ground water in various states.

# APPLICATION RATES:

SOIL TEXTURE	BROADCAST RATE PER ACRE			
	Less than 3% Organic Matter		3% or more Organic Matter	
	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BALANCE PRO (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BALANCE PRO (ounces)
Coarse*	1.00 to 1.4	1.0 to 1.88	1.25 to 1.7	1.0 to 1.88
Medium	1.25 to 2.4	1.0 to 2.50	1.75 to 2.4	1.5 to 3.00
Fine	1.75 to 2.4	1.5 to 2.75	1.75 to 2.4	2.0 to 3.50

<sup>\*</sup>It is not recommended to use Balance PRO on coarse soils with less than 1.5 percent organic matter

ACETOCHLOR 3.1 + ATZ 2.5 plus Banvel or Clarity

For use on level or flat-planted field corn on soils with more than 2 percent organic matter

Apply in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Preemergence Surface

Corn seeds must be planted 1 - 1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1 - 1/2 inches beneath the soil surface.

For Use on Kochia - Preemergence Surface only – Banvel and Clarity tank mix rates may be reduced to 0.25 to 0.5 pint per acre in soils less than 3% organic matter, or 0.5 pint per acre in soils equal to or greater than 3% organic matter, Follow all label restrictions.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 8 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control, Addition of Accent to this tank mixture will improve control of emerged grasses. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. Postemergence surface applications using sprayable fluid fertilizer as the carrier are not recommended because severe crop injury may occur.

NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow irrigated com, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

# APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	Less than 3% Org.	anic Matter	3% or more Orga	nic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BANVEL or CLARITY (pints)	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BANVEL or CLARITY (pints)	
Coarse *	1.4	1.0	1.7	1.0	
Medium	1.7 to 2.3	1.0	2.3	1.0	
Fine	2.3	1.0	2.3 to 13.0	1.0	

<sup>\*</sup> On coarse-textured soils containing 2 percent or more organic matter, use ACETOCHLOR 3.1 + ATZ 2.5 plus Banvel only on sandy loam. Do not use on sand and loamy sand with less than 2 percent organic matter.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

# ACETOCHLOR 3.1 + ATZ 2.5 plus Callisto

For Postemergence Surface Applications for Field Corn, Production Seed Corn and Silage Corn

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Postemergence Surface

Callisto is not registered in all states. Follow all Restrictions and Precautions on the Callisto label including planting depth, environmental precautions, and soil type restrictions.

Do not apply to the following soils if ground water depth is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter or sandy learns with less than 1 percent organic matter.

# APPLICATION RATES:

ACETOCHLOR 3.1 + ATZ 2.5 may be tank mixed with 3 ounces of Callisto for postemergence applications. Use the labeled rates of ACETOCHLOR 3.1 + ATZ 2.5 that correspond to the soil texture and organic matter. Broadleaf weeds should not exceed 5 inches in height and corn must be sprayed before it exceeds 11 inches in height. Accent herbicide may be added for postemergence grass control. Follow the label for Accent rates and maximum grass sizes.

Add 2.5% (v/v) spray grade UAN (28%N) or AMS (8.5 lbs/100 gallons spray solution) DO NOT use Methylated Soybean Oil (MSO). DO NOT make post applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

ACETOCHLOR 3.1 + ATZ 2.5 plus Hornet™ WDG

Only Apply This Tank Mixture to Field Corn

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems Ground-Broadcast boom; banded

Approved Application Methods

Preplant Surface, Preplant Incorporated Applied

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe all directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

Preemergence Surface

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Adequate soil moisture is required for optimum herbicidal activity. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone.

This tank mixture may be combined with Accent herbicide at 1/3 to 213 ounces per acre to increase control of emerged grasses. Follow all label restrictions and directions.

NOTE: For all soil applications of this tank mixture, corn seeds must be planted 1-112 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter<sup>TM</sup> (terbufos) or Thimet<sup>TM</sup> (phorate) insecticides are to be applied due to the risk of severe crop injury.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 11 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. Include a non-ionic surfactant at 0.25 percent v/v (1 qt/100 gal) or crop oil concentrate at 1 percent v/v for all postemergence applications. DO NOT make postemergence surface tank mixture applications using sprayable fluid fertilizer as the total carrier because severe crop injury may occur.

NOTE: Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

NOTE: OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE ACETOCHLOR 3.1 + ATZ 2.5 AND HORNET WDG LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

# Application Rates

	BROADCAST RATE PER ACRE				
	Less than 3% C	organic Matter	3% or more Ore	ganic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	Hornet WDG* (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	Hornet WOG (ounces)	
Coarse	1.4	3.0	1.7	3.0	
Medium	1.7 to 2.4	3.0 to 4.0	2.3 to 2.6	3.0 to 4.0	
Fine	2.3 to 2.6	3.0 to 4.0	2.3 to 3.0	3.0 to 4.0	

<sup>\*</sup> Hornet may be substituted for Hornet WDG at 80% of the rates above.

ACETOCHLOR 3.1 + ATZ 2.5 plus Marksman

For use on level or flat-planted field corn on soils with more than 2 percent organic matter.

Apply in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground-Broadcast boom; banded

Approved Application Methods

Preemergence Surface

Corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1-1/2 inches beneath the soil surface.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 8 inches in height.

NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

#### APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	2% to 3% Org	anic Matter	3% or more Ord	anic Matter	
SOIL TEXTURE	+ ATZ 2.5 (quarts)	MARKSMAN (pints)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	MARKSMAN (pints)	
Coarse*	1.4	2.5 to 3.5	1.7	2.5 to 3.5	
Medium	1.7	2.5 to 3.5	1.7	2.5 to 3.5	
Fine	1.7	2.5 to 3.5	1.7	2.5 to 3.5	

<sup>\*</sup>On coarse-textured soils containing 2 percent or more organic matter, use ACETOCHLOR 3.1 + ATZ 2.5 plus Marksman only on sandy loam. Do not use on sand and loamy sand with less than 2 percent organic matter.

ACETOCHLOR 3.1 + ATZ 2.5 plus Permit

Apply this tank mixture in water after crop emergence.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and before grass weeds reach the 2leaf stage. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected.

# APPLICATION RATES:

	BROADCAST RATE PER ACRE"				
<u> </u>	Less than 3% Org	anic Matter	3% or more Organ	nic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PERMIT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PERMIT (ounces)	
Coarse	1.4	0.67	1.7	0.67	
Medium	1.7 to 2.3	0.67	2.3	0.67	
Fine	2.3	0.67	2.3 to 3.0	0.67	

<sup>\*</sup>In areas of heavy weed infestation use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Prowl

Apply this tank mixture in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground—Broadcast boom; banded Dry Bulk Fertilizer Impregnation

Approved Application Methods

Preemergence Surface

DO NOT preplant incorporate this tank mixture as serious crop injury can result.

# APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	2% to 3% Orga	nic Matter	3% or more Orga	nic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PROWL* (quarts)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PROWL* (quarts)	
Coarse	1.4	0.8	1.7	0.8 to 1.0	
Medium	1.7 to 2.3	0.8 to 1.0	2.3	1.0	
Fine	2.3	1.0	2.3 to 3.0	1.0	

<sup>\*</sup> Use rates listed in this label using Prowl. Use equivalent rates when using Prowl 3.3 EC formulation. One

quart of Prowl equals 1.2 quarts of Prowl 3.3 EC. Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Pursuit

Apply this tank mixture either before or after crop emergence. Refer to the Pursuit herbicide label for specific weeds controlled postemergence.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Preplant Incorporated; Preemergence Surface

Postemergence Surface

Apply this tank mixture before weeds reach 3 inches in height and the corn is no more than 11 inches in height. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make posternergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

NOTE: THIS TANK MIXTURE IS FOR USE ONLY ON SELECTED FIELD CORN HYBRIDS (MI-CORN) WARRANTED BY THE SEED COMPANY TO POSSESS RESISTANCE/TOLERANCE TO DIRECT APPLICATION OF PURSUIT (FOR EXAMPLE: PIONEER IR HYBRIDS). DO NOT APPLY PURSUIT TO CORN HYBRIDS WHICH LACK GENETIC RESISTANCE/TOLERANCE TO PURSUIT HERBICIDE. OBSERVE ALL PRECAUTIONS AND LIMITATIONS ON THE ACETOCHLOR 3.1 + ATZ 2.5 AND PURSUIT LABELS BEFORE USE OF THIS TANK MIXTURE INCLUDING PRECAUTIONS ON MINIMUM RECROPPING INTERVAL AND ROTATIONAL GUIDELINES.

## APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	Less than 3% Orga	anic Matter	3% or more Organ	ic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PURSUIT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PURSUIT (ounces)	
Coarse	1.4	4	1.7	4	
Medium	1.7 to 2.3	4	2.3	4	
Fine	2.3	4	2.3 to 3.0	4	

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Python™ WDG

Only Apply This Tank Mixture to Field Corn

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems Ground--Broadcast boom; banded

Approved Application Methods

Preplant Surface Applied

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

# Preemergence Surface

NOTE: For all soil applications of this tank mixture, corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter (terbufos) or Thimet (phorate) insecticides are to be applied due to the risk of severe crop injury.

NOTE: Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

NOTE: OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE ACETOCHLOR 3.1 + ATZ 2.5 AND PYTHON LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

# Application Rates

	BROADCAST RATE PER ACRE				
	Less than 3% (	Organic Matter	3% or more Or	ganic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PYTHON WDG* (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PYTHON WDG (ounces)	
Coarse	1.4	0.80	1,7	0.89	
Medium	1.7	0.89	2.3 to 2.6	1, 0	
Fine	2.3 to 2.6	0.89	2.3 to 3.0	1.0	

<sup>\*</sup> In areas of heavy weed infestation use up to 4.3 quarts per acre on medium- and fine-textured soils.

<sup>\*\*</sup> Refer to the "USE RESTRICTIONS" and "GENERAL INFORMATION" sections of this label and Python WDG for restrictions

ACETOCHLOR 3.1 + ATZ 2.5 plus Princep

For additional preemergence control of heavy weed infestations and/or hard-to-control weeds listed in the "WEEDS CONTROLLED" section of this label, refer to the following rate table to determine the recommended rates for this tank mixture on various soil types.

	BROADCAST	RATES PER ACRE
SOIL TEXTURAL GROUP	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PRINCEP 4L" (quarts)
Coarse	1.7	0.8 to 1.0
Medium	2.3	1.0 to 1.5
Fine	2.3 to 3.0	1.0 to 1.5

\* Use rates listed in this label using Princep 4L. Use equivalent rates when using the Princep Caliber 90 formulation. One quart of Princep 4L equals 1.1 pounds of Princep Caliber 90. Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

# LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN

CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES,

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

Harness, Roundup, Roundup Ready and Roundup WeatherMAX are trademarks of Monsanto Technology

Permit is a registered trademark of, and used under license from, Nissan Chemical Industries, Ltd. All other trademarks are the property of their respective owners.

# RESTRICTED USE PESTICIDE

due to ground and surface water concerns and oncogenicity concerns. For retail sale to and use only by Certified Applicators, or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

# ACETOCHLOR 3.1 + ATZ 2.5

Preemergence herbicide for weed control in Field Corn, Production Seed Corn, Silage Corn and Popcorn.

# **ACTIVE INGREDIENTS:\***

Acetochlor, 2-chloro-N-ethoxymethyl-N-(2-ethyl-6-methylphenyl)acetamide	.33.4%
Atrazine, 2-chloro-4-(ethylamino)-6-(isopropylamino) s-triazine and related triazines	
OTHER INGREDIENTS:	39.7%
TOTAL:	00.0%

\*Contains 372 grams/litre or 3.1 pounds/gallon of acetochlor and 300 grams/liter or 2.5 pounds/gallon of atrazine and related compounds.

# CAUTION

## KEEP OUT OF REACH OF CHILDREN

	FIRST AID
IF IN EYES	<ul> <li>Hold eye open and rinse slowly ant gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a Poison Control center or doctor for treatment advice.</li> <li>Sensitized persons should avoid further contact and reuse of contaminated clothing.</li> </ul>
IF SWALLOWED	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
IF INHALED	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice</li> </ul>

In case of an emergency involving this product, call CHEMTREC at 1-800-424-9300

EPA Reg. No. 42750-appl

EPA Est. No. 42750 MO-001

**NET CONTENTS:** 

MANUFACTURED BY: Albaugh, Inc. Ankeny, IA 50021

## PRECAUTIONARY STATEMENTS

## Hazards to Humans and Domestic Animals

CAUTION! HARMFUL IF SWALLOWED OR INHALED. CAUSES EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

Mixers, Loaders, Applicators and other handlers must wear:

- 1. Long-sleeved shirt and long pants
- Chemical resistant gloves made of such as polyethylene or polyvinyl chloride,
   Shoes plus socks,
- 4. Chemical-resistant apron when mixing/loading, cleaning up spills, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **ENGINEERING CONTROLS**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 1.40 CFR 170.240(4)(4-6)1, the handler PPE requirements may be reduced or modified as specified in the WPS.

## USER SAFETY RECOMMENDATIONS

#### USERS SHOULD:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 2. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean
- 3. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

Atrazine can travel (seep or leach) through soil and can enter ground water which may be used as drinking water. Atrazine has been found in ground water. Users are advised not to apply atrazine to sand and loamy sand soils where the water table (ground water) is close to the surface and where these soils are very permeable, i.e. well drained. Your local agricultural agencies can provide further information on the type of soil in your area and the location of ground water.

Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

This product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff and drift from treated areas maybe hazardous to aquatic organisms in neigh-boring areas. Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination.

Acetochlor has properties that may result in surface water contamination via dissolved runoff and runoff erosion. Practices should be followed to minimize the potential for dissolved runoff and/or runoff erosion.

See Use restrictions and Tile-Terraced Fields sections for additional specific information.

## DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Read the entire label before using this product. Use only according to label instructions.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

THIS IS AN END-USE PRODUCT. MONSANTO DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

ANY USE OF THIS PRODUCT IN AN AREA WHERE USE IS PROHIBITED IS A VIOLATION OF FEDERAL LAW. Before using this product, you must consult the Atrazine Watershed Information Center (AWIC) to determine whether the use of this product is prohibited in your watershed. AWIC can be assessed through <a href="https://www.atrazine-watershed.info">www.atrazine-watershed.info</a> or 1-866-365-3014. If use of this product is prohibited in your watershed, you may return this product to your point of purchase or contact Albaugh, Inc. for a refund.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, are:

- 1. Coveralls
- 2. Chemical resistant gloves such as any waterproof material
- Shoes plus socks.

## STORAGE AND DISPOSAL

Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

PESTICIDE STORAGE: Keep container closed to prevent spills or contamination.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product that can-not be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures.

CONTAINER DISPOSAL: Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

(See the individual container label for disposal information.)

[alternate language for refillable/mini bulk or bulk containers]

Instructions for Users: When the container is empty, replace the cap and seal all openings that have been made during usage, and return the container to the point of purchase, or to an alternate location designated by the registrant at the time of purchase of this product. If not returned to the point of purchase or a designated location, triple rinse or pressure wash the empty container and offer it for recycling if available. If not refilled or recycled, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Instructions for Users and Refillers: This container may be refilled only with this pesticide product. Do not reuse this container for any other purpose. Do not transport if this container is damaged or leaking. If the container is damaged or leaking or obsolete, or to obtain information about recycling refillable containers, contact Albaugh Customer Service. Cleaning is not necessary prior to compliance with state and local recommendations.

[alternate language for plastic 1-way containers]

Do not reuse container. Triple rinse container, then puncture and dispose of in sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[alternate language for drums]

Do not reuse container. Return container per the Albaugh container return program. If not returned, triple rinse container, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### GENERAL INFORMATION

This product is recommended for control of yellow nutsedge and many annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. This product alone will not control emerged seedlings. This product may be applied either as a surface application before or after planting or after crop emergence. This product may also be shallowly incorporated prior to planting to blend the herbicide treatment into the upper 1 to 2 inches of soil. Except for minimum or conservation tillage systems, the seedbed should be fine, firm and free of clods and trash.

Read and carefully observe cautionary statements and all other information appearing on the labeling of all products used in mixtures and sequential treatments. Refer to the product labels of herbicides used in tank mixtures with this product to determine the weeds controlled by those products.

NOTE: Use this product for weed control in corn only. CORN (ALL TYPES INCLUDING SWEET CORN), MILO (SORGHUM), OR SOYBEANS CAN BE PLANTED THE YEAR FOLLOWING THE USE OF THIS PRODUCT IF SOYBEANS OR OTHER NONLABELED CROPS ARE TO BE PLANTED THE FOLLOWING YEAR, THERE IS THE POSSIBILITY OF CROP INJURY DUE TO CARRYOVER OF ATRAZINE.

## USE RESTRICTIONS

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the ground water is shallow, may result in ground water contamination. Do not apply to the following soils where depth to ground water is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter: or sandy loans with less than 1 percent organic matter.

This product may not be mixed or loaded within 50 feet of intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be applied within 66 feet of all points where field surface water runoff enters perennial or intermittent streams and rivers or within 200 feet around natural or impounded lakes and reservoirs. If this product is applied to highly erodible land, the 66-foot buffer or set-back from runoff points must be planted to a crop or seeded with grass, or other suitable crop.

This product may not be mixed or loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 feet of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rainwater that may fall on pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain a minimum of 110 percent of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from con-tact with the pad shall have a minimum containment capacity of 100 percent of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

Additional State imposed requirements regarding well-head setbacks and operational area containment must be observed.

Do not flood irrigate to apply or incorporate this product.

Product must be used in a manner which will prevent back siphoning into wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

Do not apply this product through any type of irrigation system.

Disposal of excess pesticide, spray mixtures or rinsate should be according to label use instructions or according to the state Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA regional office.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas. To prevent off-site movement due to runoff or wind erosion:

Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.

Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or

snow covered soils.

Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops unless at least 1/2 inch of rain-fall has occurred between application and the first irrigation.

Do not apply this product using aerial application equipment.

Do not apply when wind conditions favor drift to non-target sites. To minimize spray drift to non-target areas:

Use low pressure application equipment capable of producing a large droplet spray. Do not use nozzles that produce a fine droplet spray. Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.

Keep ground driven spray boom as low as possible above the target surface.

Make application when the wind velocity favors on-target product deposition (approximately 3-10 miles per hour). Do not apply when wind velocity exceeds 15 miles per hour. Avoid application when gusts approach 15 miles per hour.

Low humidity arid high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperatures. Do not apply during inversion conditions.

Use of this product not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences.

For field corn forage use, allow 60-day preharvest interval.

Flush sprayer with clean water after use.

When tank mixing or sequentially applying, atrazine or products containing atrazine to corn, the total pounds atrazine applied (pounds active ingredient per acre) must not exceed 2.5 pounds active ingredient per acre.

Tile-Terraced Fields Containing Standpipes

To ensure protection of surface water from runoff through standpipes with tile-outlets in terraced fields, one of the following options must be used:

- Do not apply this product within 66 feet of standpipes in the tile-outletted fields.
- Apply this product to the entire tile-outletted field and immediately incorporate it to a depth of 2 to 3 inches in the entire tile-outletted field.
- Apply this product to the entire tile-outletted field under a no-till practice only when a high crop residue
  management practice is used. High crop residue management practice is described as a crop
  management practice where little or no crop residue is removed from the field during or after crop
  harvest.

## SOIL TEXTURE

Applicators should evaluate soil conditions carefully to assure that they choose the correct label rate.

The recommended use rates of this product and the other herbicides labeled for use in tank mixtures with this product vary with soil texture. Unless soil texture is specifically named, rate tables through-out this label refer to only three soil textural groups: coarse, medium and fine. The following is a complete listing of soil

textures included in each of these three soil textural groups:

SOIL TEXTURAL GROUP	SOIL TEXTURE
COARSE	sand, loamy sand, sandy loam
MEDIUM	loam, silt loam, silt, sandy clay loam
FINE	Silty clay loam, clay loam, sandy clay, silty clay, clay

Refer to the above table to determine the corresponding soil textural group for the soil to be treated.

# MIXING, SPRAYING AND HANDLING INSTRUCTIONS

NOTE: Direct contact or exposure to this product or spray mixtures of this product should be minimized. The following instructions for transfer, mixing cleaning or repairing equipment should be followed in order to minimize this exposure. Review the protective clothing requirements as listed in the "PRECAUTIONARY STATEMENTS" section of this label (front panel) and do not use this product until you have the necessary protective clothing.

## 2.5 Gallon Containers

Open pouring from these containers can result in exposure from splashing or spilling. Special care in lifting and pouring are strongly recommended.

# **Bulk Containers**

Open pouring from these containers can result in exposure from splashing or spilling and is not recommended. This product should be transferred from these containers to the mix or spray tank using pumps or transfer probes. The probe or pump should not be removed from the container or disconnected until the container is emptied and rinsed. Use the pump or probe system to rinse the empty container and transfer the rinsate directly to the mix or spray tank.

# Equipment Cleaning and Repair

Cleaning and repair of transfer systems and application equipment is a source of exposure to this product. Care should be taken to minimize exposure during cleaning and repair of transfer systems and application equipment. Whenever possible, these systems or equipment should be rinsed before being cleaned or repaired.

When repairs must be made during transfer or application, the equipment should be shut down, and special care taken to avoid contact with the pesticide.

#### Sprayer Compatibility

Always predetermine the compatibility of this product or labeled tank mixtures of this product with water carrier or sprayable fluid fertilizer carrier by mixing small proportional quantities in advance. See the "STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST" section in this label to determine the compatibility of this product and the labeled tank mixtures recommended for use with sprayable fluid fertilizer carrier.

Mix this product or labeled tank mixture of this product with the appropriate carrier as follows:

- 1. Place a 20 to 35 mesh screen or wetting basket over filling port.
- 2. Through the screen, fill the sprayer tank one-half full with the appropriate carrier.
- 3. If a compatibility agent is necessary to improve mixing or to prevent the formation of undesirable and unsprayable gels or precipitates, while agitating add it to the carrier already in the tank. Use only

compatibility agents cleared by FDA for this use. Read and follow all directions for use, cautionary statements and all other information appearing on the selected compatibility agent label. Check for adequate agitation.

4. If a wettable powder or dry flowable formulation is used, make a slurry with water and add it slowly

through the screen into the tank. Continue agitation.

If a flowable formulation is used, add slowly through screen into the tank. Mixing and compatibility may be improved when flow-able is pre-mixed one part flowable with one part water and added to the tank in diluted form.

6. Add this product slowly through the screen into the tank. Mixing and compatibility maybe improved when

this product is prediluted with two parts of water and added to the tank in diluted form.

Complete filling the sprayer tank with carrier. If a Roundup" agricultural herbicide or Gramoxone" Extra
is used, add the required amount near the end of the filling process. Remove hose from tank immediately
after filling to avoid siphoning back into the carrier source.

Maintain good agitation at all times until the contents of the tank are sprayed.

NOTE: If spray mixture is allowed to settle at any time, thorough agitation is required to resuspend the mixture before spraying is resumed.

Keep by-pass line on or near bottom of tank to minimize foaming. Screen size in nozzle or line strainers should be 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. Check for even distribution of spray droplets. To reduce loss of the chemical due to drift of a fine mist, apply at nozzle pressures below 40 psi.

# STANDARD SPRAYABLE FLUID FERTILIZER COMPATIBILITY TEST

Herbicides may not always mix evenly throughout a sprayable fluid fertilizer or the components may separate too quickly to make their combined use of practical value. This may be due to certain characteristics of the different fluid fertilizers. A simple test using small quantities of the components is suggested to provide compatibility potential. The test follows:

# A. Materials Required For a Compatibility Test

Two one-quart jars with lid or stopper (marked "with" and "with-out").

- TEAspoons (for a more exacting test, a five to ten milliliter (ml.) pipette or graduated cylinder is desirable).
- 3. Sprayable fluid fertilizer to be tested.

4. The herbicide chemicals to be mixed.

A compatibility agent (the purpose of the adjuvant is to help keep the fertilizer and crop protection chemical in suspension, if this assistance is needed).

## B. Procedure

1. Add one pint of the sprayable fluid fertilizer that will be used or other herbicide carrier to each jar marked "with" and "without".

	Liquid Fertilizer
To Two	Quart Jars.
WITH	WITHOUT

2. To the jar marked "with", add 1/4 TEAspoon or 1.2 milliliters of a suitable compatibility agent; shake gently for five to ten seconds to mix. (1/4 Teaspoon in one pint is the equivalent of two pints per 100 gallons of liquid fertilizer.)

	To jar marked "With" Id Compatibility Agent
	and Shake to Mix
WITH	WITHOUT

3. To each jar add the appropriate amount of herbicide(s). If more than one is used, add them separately with the wettable powders or dry flowables added first, flowables second and liquid last. Shake gently five to ten seconds after each addition.

	ide(s) To Both Jars Shake to Mix.
WITH	WITHOUT

			Amount to Be Added Per Pint of Sprayable Fluid Fertilizer (Assuming Volume is 25 gal/A)
HERBICIDE	RATE/Acre		Level TEAspoons
Wettable Powders	1 pound	=	1.5
	2 pounds	=	3.0
Or	3 pounds	=	4.5
	4 pounds	=	6.0
Dry Flowables	5 pounds	=	7.5

HERBICIDE	RATE/Acre		Level TEAspoons	N	lilliliters
Emulsifiable Concentrates	1 pint	=	0.5	or	2.4
Or	1 quart	=	1.0	or	4.7
Flowables	2 quarts	=	2.0	or	9.5
Or	3 quarts	=	3.0	or	14.2
Liquids	1 gallon	=	4.0	or	19.0
Or Solutions	5 quarts	=	5.0	or	23.8

This compatibility test is designed for 25 gallons of spray per acre with the maximum labeled rate of herbicide. For changes in spray volume or herbicide rate, make appropriate changes in the ingredients of the test. Regardless of spray volume, the amount of compatibility agent should be equal to two or three pints (two pints = 1/4 TEAspoon or 1.2 milliliters, three pints 3/8 TEAspoon or 1.8 milliliters per pint of sprayable fluid fertilizer) per 100 gallons of liquid fertilizer

# C. Observations and Decisions

- 1. If the herbicide(s) and the sprayable fluid fertilizer are compatible.
- 2. If a compatibility agent is necessary.

Five minutes after the final addition and mixing, observe both jars for the formation of large flakes, sludge,

gels or other precipitates. Observe if the herbicide(s) cannot be physically mixed with the liquid fertilizer but remains as small oily particles in the solution.

If incompatibility in any form described above occurs in the jar "with" the compatibility agent added, the liquid fertilizer and the herbicides) should not be used together in the same spray tank.

If incompatibility as described above occurs in the jar "without" the adjuvant but not in the jar "with" adjuvant, the use of a compatibility adjuvant is recommended.

Both jars should be allowed to stand and be observed periodically for one-half hour. If the separate layers of liquid fertilizer and additives can be resuspended by shaking, commercial application is possible. An emulsifiable concentrate normally will go to the top after standing; wettable powders will either settle to the bottom of the tank or jar, or float to the top, depending upon the density of the fertilizers.

If the herbicide(s) is compatible with fluid fertilizer in the foregoing test without having to use a compatibility agent, fluid fertilizer may be used for the premixing. If it is not compatible without the compatibility agent. The herbicide(s) should be premixed with water before adding to the spray tank

## APPLICATION SYSTEMS

#### Ground Broadcast Treatment

Apply this product and the labeled tank mixtures in 10 or more gallons of solution per acre using broad-cast boom equipment. The carrier may be either water or sprayable fluid fertilizer as specified for the crop to be treated in the "DIRECTIONS FOR USE" section of this label. Do not apply during periods of gusty winds, when winds are in excess of 15 miles per hour or when other conditions favoring drift exist.

#### Ground Band Treatment

Apply a broadcast equivalent rate and volume per acre. To determine these:

Band width in inches Row width in inches	×	Broadcast RATE Per acre	=	Band RATE per acre
Band width in inches Row width in inches	Y	Broadcast RATE Per acre		Band VOLUME per

# Application with dry bulk fertilizer

The herbicide-fertilizer impregnation process (In-Plant and On-Board systems) must be completed only by commercial fertilizer or chemical dealerships properly equipped for this procedure. Contact Monsanto Company for additional information regarding recommended equipment and methods for herbicide-fertilizer impregnation applications.

Dry bulk fertilizer may be impregnated with this product or the tank mixtures of this product plus atrazine on corn. This product and these tank mixtures most be applied with 200 to 450 pounds of dry bulk fertilizer per acre and shallowly incorporated within 14 days prior to planting. On medium and fine-textured soils in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional tillage situations, applications can be made up to 30 days before planting to allow moisture to move the herbicide-fertilizer mixture into the soil. On coarse-textured soils, applications can be made up to 14 days prior to planting. The herbicide must be applied as recommended in this label for the crop, weed and soil type treated. Refer to the table for broadcast rate per acre to deter-mine the recommended rate per acre for the herbicide treatment to be applied.

Impregnation of bulk fertilizer is restricted to commercial facilities. On-farm fertilizer impregnation is prohibited. No more than 500 tons of bulk fertilizer can be impregnated per day. No single facility may impregnate fertilizer with this product for more than 30 days per calendar year.

The commercial facility impregnating the dry bulk fertilizer must inform, in writing, the use (applicator) of the dry bulk fertilizer that:

- · Applicators must wear long-sleaved shirt, long pants, shoes plus socks
- Do not enter or allow others to enter the treated areas (except those involving watering) until the watering-in is complete and the surface is dry.

The following table provides a reference to determine the amount of LIQUID herbicide to be mixed per ton of dry bulk fertilizer for a range of herbicide recommendations for fertilizer rates per acre:

Fertilizer Rate	Acres Covered	RECOMMENDED	QUARTS OF LIQUID	HERBICIDE/ACRE
(pounds/Acre)	(per ton)	1.4	1.8	2.3
		(quarts of herbicide/Ton Dry Bulk Fertilizer)		
200	10.0	14.0	18.0	23.0
250	8.0	11.2	14.4	18.6
300	6.7	9.4	12.0	15.5
350	5.7	8.0	10.3	13.3
400	5.0	7.0	9.0	11.7
450	4.5	6.2	8.0	10.4

To determine the amount of herbicide needed for rates not included in the preceding table, use the following formula:

Recommended Herbicide Rate

		0 1 (1 111)
Quarts/Acre X 2000	=	Quarts of herbicide
Pounds Fertilizer/Acre		per ton of dry bulk fertilizer

With the In-Plant system, mix and blend the dry fertilizer and herbicide mixture in a closed rotary-drum type mixture allowing sufficient time to ensure uniform coverage. Use at least one ton of dry fertilizer per mixing operation. Inject the herbicide into the drum over a minimum of a 2-minute period and allow at least 2 additional minutes mixing time to ensure uniformity. The nozzle used to spray the herbicide treatment must be placed inside the mixer to provide uniform spray coverage of the tumbling fertilizer.

If the dry fertilizer used has inadequate absorptive capacity, use a higher absorptive material such as Agsorb<sup>TM</sup>, MP-79<sup>TM</sup> or Micro-cel<sup>TM</sup> E, to provide a free-flowing mixture. Contact Monsanto Company for specific guidelines with regard to the sequence of addition for the various components and the amount of drying agent to add to pro-vide a free-flowing mixture.

The following table provides a partial list of dry fertilizers which may be impregnated with this product.

Ammonium sulfate	21-0-0
Ammonium phosphate-sulfate	16-20-0
Diammonium phosphate	18-46-0
Potassium chloride	0-0-60
Potassium sulfate	0-0-52
*Urea	46-0-0

<sup>\*</sup>Some ureas may be phytotoxic when applied on corn. Use only ureas known to be safe to corn.

NOTE: DO NOT impregnate this product or tank mixtures of this product with other herbicides on fertilizers containing ammonium nitrate, potassium nitrate or sodium nitrate. Spread the herbicide-dry fertilizer mixture uniformly with a properly calibrated applicator: dribble, pneumatic (air flow) or spin. When using spin applicators, fertilizers impregnated with this product or tank mixtures of this product with other herbicides must be spread at half-rate and overlapped 100 percent to obtain full rate and uniform distribution. Non-uniform spreading of the fertilizer-herbicide mixture may result in unsatisfactory weed control or crop injury.

# APPLICATION TIMING AND METHODS

The maximum total per crop season of this product is 3.8 quarts.

# Early Preplant Surface Application

This product and some labeled tank mixtures of this product may be applied in no-till and other conservation tillage systems before weeds emerge and up to 45 days before planting field corn or silage corn. Split applications can be made 30 to 45 days prior to planting with 60 percent of the recommended broad-cast rate applied initially and the remaining 40 percent applied at planting. Applications made less than 30 days prior to planting can be made either as a split or as a single application. If weeds are pre-sent at the time of application, apply this product in tank mixture with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

# Preplant Incorporation Application

This product and many of the labeled tank mixtures may be mixed into the soil using shallow incorporation equipment any time within 14 days prior to planting. Apply the recommended treatment rate to the soil surface as a broadcast application. Either existing soil moisture or subsequent precipitation or irrigation is required to bring incorporated herbicide treatments into contact with germinating weed seedlings. If weeds emerge after treatment, rotary hoe or shallowly cultivate immediately to improve performance.

Shallowly incorporate the treatment into the upper 1 to 2 inches of the soil. Equipment should be operated at manufacturer's designed speed for incorporation to ensure adequate mixing and distribution of the herbicide treatment in the soil. Equipment design including any drag attachments must be adequate to avoid soil ridging which may result in streaked or reduced weed control. Soil conditions, including moisture content and crop residue levels, must be suitable to allow thorough and uniform mixing with the equipment used for 1-pass incorporation.

# Preemergence Surface Application

This product and all labeled tank mixtures may be applied to the soil surface after planting and prior to either crop or weed emergence. Apply within 5 days of last preplant tillage. If weeds emerge after treatment, or if treatment is applied more than 5 days after last preplant tillage, rotary hoe or shallowly cultivate immediately to improve performance. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone. The amount of precipitation or overhead sprinkler irrigation required depends on existing soil mixture, soil type and percent organic matter content, but 1/3 to 3/4 inch is normally adequate. Performance is improved when moisture is received within 7 days after application and prior to weed emergence. High intensity or excessive rainfall or excessive irrigation after application may reduce control.

# Postemergence Surface Application

This product and certain tank-mixtures may be applied postemergence until corn reaches 11 inches in height. Application must be made prior to the 2-leaf grass stage or in a tank-mixture that controls emerged weeds. Read and follow all restrictions and directions on tank-mix product labels. Refer to the specific treatment intended in the "DIRECTIONS FOR USE" section of the label to determine if postemergence applications to corn are recommended and determine the proper weed and corn growth stage limitations. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone to control unemerged weeds. The amount of precipitation or irrigation required depends on existing soil moisture, soil type and percent organic matter content, but 1/4 to 3/4 inch is normally adequate. If weeds emerge after treatment, rotary hoe or shallowly cultivate to improve performance.

DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

#### Cultivation Information

Delay cultivation after application for as long as possible unless weeds or grasses emerge. Shallowly cultivate or rotary hoe immediately if weeds or grass emerge. If cultivation is necessary because of soil crusting or compaction, set equipment shallow and minimize lateral soil movement to avoid dilution or displacement of the herbicide treatment. If a band application is used and weeds have emerged in the treated band, set cultivator to throw soil into the row covering the band.

## WEEDS CONTROLLED

When applied as directed under conditions described, this product will CONTROL the following weeds:

# ANNUAL GRASSES CONTROLLED

Barnyardgrass Echinocloa crus-galli

Crabgrass Digitaria ischaemum Digitaria sanguinalis

Foxtail, giant Setaria faberi

Foxtail: green, robust purple, robust white Setaria viridis

Foxtail, yellow Setaria lutescens

Goosegrass Eleusine indica

Oat, wild Avena fatua

Panicum, browntop Panicum fasciculatum Panicum, fall Panicum dichotomiflorum

Rice, red Oryza sativa

Signalgrass, broadleaf Brachiaria platyphylla

Sprangletop, red Leptochloa filiformis

Wheat, volunteer Triticum aestivum

Witchgrass Panicum capillare

# ANNUAL BROADLEAVES CONTROLLED

Beggarweed, Florida Desmodium tortuosum

Carpetweed Mollugo verticillata

Cocklebur\* Xanthium strumarium

Galinsoga spp.

Groundcherry, annual Physalis spp.

Groundcherry, cutleaf Physalis angulata

Henbit Lamium amplexicaule

Jimsonweed Datura stramonium

Kochia\*\* Kochia scoparia

Lambsquarters Chenopodium album

Morningglory, annual\* Ipomoea purpurea Mustard Brassica spp.

Nightshade, black Solanum nigrum

Nightshade, hairy Solanum sarrachoides

Pigweed, Carelessweed Amaranthus spp.

Purslane Portulaca oleracea

Pusley, Florida Richardia scabra

Ragweed, common Ambrosia antemisiifolia

Sida, prickly; Teaweed Side spinosa

Smartweed Polygonum pensylvanicum Polygonum persicaria

Velvetleaf, Buttonweed\* Abutilon theophrasti

Waterhemp Amaranthus tuberculatus

# SEDGE

Nutsedge, yellow\* Cyperus esculentus

\*Preplant incorporate for control.

# ANNUAL GRASSES PARTIALLY CONTROLLED

When applied immediately after planting and within 5 days of last tillage, this product at a rate of 2.3 to 2.7 quarts per acre on a broadcast basis will reduce competition from the following HARD-TO-CONTROL weeds.

Cupgrass, woolly Enochloa villosa

Johnsongrass, seedling Sorghum halepense Millet, proso Panicum miliaceum

Panicum, Texas
Panicum texanum

Sandbur, Grassbur Cenchrus incertus

Shattercane, wildcane Sorghum bicolor

# ANNUAL BROADLEAVES PARTIALLY CONTROLLED

Ragweed, giant Ambrosia trifida

Sicklepod Cassia obtusifolia

Sunflower, common Helianthus annuus

NOTE: For hard-to-control weeds, additional amounts of Harness herbicide and/or atrazine may be added to the recommended treatment rates for this product to provide improved control. For more consistent control of common cocklebur, annual morningglory or velvetleaf, additional atrazine may be applied so that the total atrazine rate is at least 1.5 quarts per acre on medium-textured soil with less than 3 percent organic matter, and 1.5 to 2 quarts on medium- and fine-textured soils with 3 percent or greater organic matter content. For more consistent control of woolly cupgrass additional Harness may be applied so that the total acetochlor rate is 3.0 pounds per acre. The following table shows the amounts of Harness and/or atrazine that can be added to specific treatment rates of this product.

The maximum atrazine broadcast application rates for corn:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2 pounds active ingredient per acre broadcast. If a postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 pounds active ingredient per acre per calendar year.
- Apply a maximum of 2.0 pounds active ingredient per acre as a single preemergence application on soils that are not highly erodible or on highly erodible soils (as defined by the Natural Resources Conservation Service) if at least 30 percent of the soil is covered with plant residues.
- Apply a maximum of 1.6 pounds active ingredient per acre as a single preemergence application on highly erodible soils (as defined by the Natural Resources Conservation Service) if <30 percent of the surface is covered with plant residues; or 2.0 pounds active ingredient per acre if only applied postemergence.

Do not use more than 2.7 quarts of this product per acre per calendar year. APPLICATION RATES:

RECOMMENDED RATE	PRODUCT A	meany - a section
ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ACETOCHLOR 7E (pints)	ATRAZINE (quarts)
1,4	2.0	1.1
1.8	1.8	0.8
2.3	1.3	0.5

# CONSERVATION OR MINIMUM TILLAGE SYSTEMS

NOTE: Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications, which are not consistent with recommendations in this label, may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS AND METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

# Tank Mixtures At-Planting Applications

The tank mix recommendations in the Conventional Tillage Section of this label may also be followed when using Conservation or Minimum Tillage Systems. Follow all label precautions, directions and restrictions of tank mix partners.

When applied as directed under the conditions described, the recommended tank mixtures control many emerged annual weeds, suppress many emerged perennial weeds and give preemergence control of many annual grasses and weeds when corn will be planted directly into a cover crop, established sod or in previous crop residues. These tank mixtures will not control regrowth from perennial weeds.

## DO NOT APPLY BY AIR.

Refer to specific product labels for crop rotation restrictions and precautionary statements of all products used in these tank mixtures.

# Additional Preemergence Control

ACETOCHLOR 3.1 + ATZ 2.5 and tank mixtures with Princep<sup>TM</sup> or Pursuit can be tank-mixed with a Roundup agricultural herbicide, Gramoxone Extra and/or 2,4-D. Refer to specific sections for detailed instructions for tank mixes with Princep or Pursuit.

ACETOCHLOR 3.1 + ATZ 2.5 may be tank-mixed with Princep and a Roundup agricultural herbicide, Gramoxone Extra and/or 2.4-D. Apply the recommended tank mixtures with a Roundup agricultural herbicide or 2,4-D (amine or low volatile ester) in 10 to 20 gallons of water or 10 to 60 gallons of nitrogen solution per acre, or the tank mixtures with Gramoxone Extra in 20 to 60 gallons of water or clear liquid fertilizer per acre immediately before, during or after planting, but BEFORE CROP EMERGENCE. As density of stubble, crop residue or weeds increase, spray gallonage and rate should be increased within the recommended ranges to ensure complete coverage. In the absence of emerged vegetation, delete the Roundup agricultural herbicide, Gramoxone Extra or 2,4-D portion of these tank mixtures.

# Control or Suppression of Emerged Weeds

ATTENTION: AVOID DRIFT-EXTREME CARE MUST BE USED WHEN APPLYING THESE TANK MIXTURES TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS. Do not allow spray mist to drift

since even minute quantities of spray can cause severe damage or destruction to nearby crops, plants or other areas on which treatment is not intended. Do not apply when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in fine particles (mist) which are more likely to drift.

Roundup WeatherMAXTM Herbicide

# Annual Weeds

Apply Roundup WeatherMAX herbicide, or other Roundup agricultural herbicides, in these tank mixtures at the proper rate for the weed per the label instructions.

#### Perennial Weeds

At normal application dates in minimum tillage systems, perennial weeds may not be at the proper stage of growth for control. Use of 1.3 to 2.7 quarts of Roundup WeatherMAX herbicide per acre, or equivalent rates of other Roundup agricultural herbicides, in the recommended mixtures under these conditions provides top kill and reduces competition from many emerged perennial grasses and broadleaf weeds.

USE OF THIS MIXTURE FOR BERMUDAGRASS OR JOHNSONGRASS CONTROL IS NOT RECOMMENDED.

NOTE: When using these tank mixtures, do not exceed 2.7 quarts of Roundup WeatherMAX herbicide per acre.

#### Ammonium Sulfate

The addition of ammonium sulfate in the spray solution may increase the performance of Roundup agricultural herbicide tank mixtures on emerged annual weeds under adverse growing conditions. When using ammonium sulfate, add 2 percent dry ammonium sulfate by weight or 17 pounds per 100 gallons of water. Ammonium sulfate should be added to the water in the spray tank and completely dissolved prior to adding the herbicide or surfactant. Do not mix ammonium sulfate in fluid fertilizer solutions. The equivalent rate of ammonium sulfate in a liquid formulation may also be used.

If ammonium sulfate is added directly to the spray tank, add slowly with agitation. Adding too quickly may clog outlet lines. Nozzle tip plugging may result from the use of low quality ammonium sulfate. To determine quality, perform a jar test by adding 113 cup of ammonium sulfate to 1 gallon of water and agitate for one minute. If undissolved sediment is observed, predissolve the ammonium sulfate in water and filter prior to adding to the spray tank.

#### Surfactants

Nonionic surfactants that are labeled for use with herbicides may be used with some Roundup agricultural herbicides check specific label for restrictions. Do not reduce rates of Roundup agricultural herbicides when adding surfactant. Use 0.5 percent surfactant concentration (2 quarts per 100 gallons of spray solution) when using surfactants that contain at least 50 percent active ingredient or a 1 percent surfactant concentration (4 quarts per 100 gallons of spray solution) for those surfactants containing less than 50 percent active ingredient. Read and carefully observe surfactant cautionary statements and other information appearing on the surfactant label.

## Gramoxone Extra

When used as directed, Gramoxone Extra in a labeled tank mixture controls many emerged annual weeds and suppresses many emerged perennial weeds.

#### **Broadcast Treatment**

Apply 1.5 to 3 pints of Gramoxone Extra per acre in the recommended tank mixtures immediately before, during or after planting but BEFORE CROP EMERGENCE. Use 2 to 2.5 pints when weeds are 3 to 6 inches tall. Use 2.5 to 3 pints when weeds are 6 inches tall. This mixture may not control weeds taller than 6 inches. As density of stubble, crop residue or weeds increases, spray gallonage should be increased within the recommended range for complete coverage. Add a nonionic spreader surfactant (approved for use on crops) containing at least 75 percent surfactant active agent at 8 ounces per 100 gallons of diluted spray. REFER TO THE GRAMOXONE EXTRA LABEL FOR PRECAUTIONARY STATEMENTS.

## 2.4-D

When used as directed, 2,4-D in labeled tank mixtures controls many emerged annual and perennial broadleaf weeds. For emerged weeds controlled, see the "WEEDS CONTROLLED" section of the label for 2,4-D.

## **Broadcast Treatment**

Apply 1 to 2 pints of 2,4-D (amine or low-volatile ester) in the recommended tank mixtures. Applications should be made 7 to 14 days before planting or 3 to 5 days after planting but BEFORE CORN EMERGES. As density of stubble, crop residue or weeds increase, spray gallonage should be increased within the recommended range for complete coverage.

DO NOT use 2,4-D on light, sandy soils, or where soil moisture is inadequate for normal weed growth.

## Early Preplant Application

If emerged weeds are present at the time of treatment, a Roundup agricultural herbicide, Gramoxone Extra or 2,4-D should be added to this product according to the directions for use on their respective product labels. If unsatisfactory weed control occurs (due to excessively dry or excessively wet conditions) following the earlier application, a postemergence application of an appropriate labeled grass and/or broadleaf weed herbicide may be used. If a postemergence treatment includes the herbicide used early preplant, do not exceed the labeled rate for corn on a given soil texture. Observe all precautions and limitations on the labels for ACETOCHLOR 3.1 + ATZ 2.5, Roundup agricultural herbicides, Gramoxone Extra, 2,4-D and other postemergence herbicides before use of these products.

DO NOT apply tank mixtures containing a Roundup agricultural herbicide, Gramoxone Extra or other contact herbicides by air.

# ACETOCHLOR 3.1 + ATZ 2.5

# For Use in Early Preplant

This product, when applied in a single application or split application (alone or in a tank-mix combination with Princep section 12.11) or as a sequential application to Princep in early preplant programs will provide preemergence control or reduced competition of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label. If weeds are emerged at time of application, apply a labeled contact herbicide with this product. Observe the directions for use, precautions and restrictions on the label of the contact herbicide.

Approved Application Systems Ground--Broadcast boom Dry Bulk Fertilizer Impregnation

Single application

Application of this product should be made less than 30 days before planting but prior to weed emergence. On coarse-textured soils applications should not be made more than 2 weeks prior to planting.

Split application

Apply 60 percent of the recommended rate as a split application prior to weed emergence and no more than 45 days prior to planting and the remaining 40 percent at or immediately following planting but before crop emergence.

See the following table for recommended broadcast rates per acre for single and split applications.

## APPLICATION RATES

	BROADCAST RATE PER ACRE
SOIL TEXTURAL GROUP	[ACETOCHLOR 3.1 + ATZ 2.5)*
GROUP	(quarts)
Coarse	1.7 to 2.3
Medium	2.3 to 3.0
Fine	2.3 to 3.0

<sup>\*</sup>Use the higher rate in the recommended range in areas of heavy weed infestation.

This product may also be tank mixed with 1 to 1.25 quarts per acre of Princep to provide improved control of fall panicum and crabgrass.

NOTE: Do not exceed a total of 1.6 pounds of atrazine per acre on highly erodible soils with less than 30 percent plant residue cover.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

Sequential application

Application of this product following Princep (See section 12.11) should be utilized for the control of fall panicum, crabgrass or broadleaf signal grass. Apply 1 to 1.25 quarts per acre of Princep prior to weed emergence and no more than 45 days prior to planting. At or immediately following planting, but before crop emergence, apply the recommended rate of this product.

Following application of Princep see the following table for recommended rates.

## APPLICATION RATES

LO	
	BROADCAST RATE PER ACRE
SOIL TEXTURAL GROUP	ACETOCHLOR 3.1 + ATZ 2.5 *
Coarse	1.7
Medium	2.3
Fine	_2.3 to 3.0

<sup>\*</sup>Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: Do not exceed a total of 1.6 pounds of atrazine per acre on highly erodible soils with less than 30 percent plant residue cover.

When using Princep 90 DF use equivalent rates. One quart of Princep 4L equals 1.1 pounds of Princep 90 DF.

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds.

#### CONVENTIONAL TILLAGE

NOTE: Each section of this label provides recommended treatment rates for this product and tank mixtures including this product. Applications that are not consistent with recommendations in this label may result in unsatisfactory weed control, injury to crops, persons or animals, or other unintended consequences. Refer to specific product labels for crop rotation restrictions and cautionary statements of all products used in these tank mixtures, including precautions on soil pH, sensitive varieties, minimum re-cropping interval and rotational guidelines.

Use the higher rates in the recommended ranges in areas of heavy weed infestation or where otherwise specified. If emerged weeds exist at planting, the application of a contact herbicide or tillage is recommended when possible to eliminate existing weeds. Do not apply when conditions favor drift.

Detailed information regarding "APPLICATION SYSTEMS" and "APPLICATION TIMINGS and METHODS" appears in the "GENERAL INFORMATION" section and should be carefully reviewed in conjunction with the information in this section. If the specific information in this section differs from the "GENERAL INFORMATION", the specific information should control.

## ACETOCHLOR 3.1 + ATZ 2.5

Apply this product in water or sprayable fluid fertilizer solution.

APPROVED APPLICATION SYSTEMS Ground—Broadcast boom; banded Dry bulk fertilizer impregnation

# APPROVED APPLICATION METHODS

Preplant Incorporated; Preemergence Surface: Postemergence Surface
Apply this product before weeds reach the 2-leaf stage and the corn is no more than 11 inches in height.

# APPLICATION RATES:

	BROADCAST RATE PER ACRE			
SOIL TEXTURE	Less than 3% organic matter (quarts)	3% or more organic matte (quarts)		
Coarse	1.4	1.7		
Medium	1.7 to 2.4	2.3 to 2.6		
Fine	2.3 to 2.6	2.3 to 3.0		

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Roundup WeatherMAX on Roundup Ready® Corn and Roundup Ready Corn 2

This program may be used preemergence and postemergence to Roundup Ready Corn and Roundup Ready Corn 2 until the corn reaches 11 inches in height. Refer to the Roundup WeatherMAX or other Roundup agricultural herbicide labels for specific weeds controlled postemergence.

AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHICH DO NOT CONTAIN THE ROUNDUP READY GENE.

Approved Application Systems Ground—Broadcast boom

Approved Application Methods

Preemergence Surface

Sequential Program: This product may be applied preemergence to Roundup Ready Corn or Roundup Ready Corn 2 at the Roundup Ready Rate of 1.5 quarts per acre in a planned preemergence followed by Roundup agricultural herbicide postemergence sequential program.

Postemergence Surface

This product is applied postemergence to Roundup Ready Corn or Roundup Ready Corn 2 from seedling emergence until the corn is 11 inches in height. The Roundup Ready rate for this product is 1.5 quarts per acre. Labeled use rates for this tank-mix are defined in the table below. Use the higher rate on larger weeds and where heavy weed infestations exist. This tank mix should be applied when weeds are 2 to 4 inches in height and before the weed height and/or density become competitive with the crop.

For difficult to control weeds such as fall panicum, barnyardgrass, crabgrass, shattercane, broadleaf signalgrass and Pennsylvania smartweed use the higher rate of Roundup WeatherMAX or equivalent rates of other Roundup agricultural herbicides.

For mixing instructions, see the "MIXING, SPRAYING AND HANDLING" section of this label.

ROUNDUP READY RATE - ACETOCHLOR 3.1 + ATZ 2.5 at 1.5 quarts per acre

Application Rates (minimum and maximum range)

	BROADCAST RATE PER ACRE			
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ROUNDUP WEATHERMAX (ounces)		
Coarse	1.0 to 2.9	16 to 22		
Medium	1.0 to 3.7	16 to 22		
Fine	1.0 to 3.7	16 to 22		

# ACETOCHLOR 3.1 + ATZ 2.5 plus Accent

Apply this tank mixture in water after crop emergence to provide preemergence and postemergence control of certain grass and broadleaf weeds. Refer to the Accent herbicide label for specific weeds controlled postemergence.

Approved Application Systems Ground—Broadcast boom; banded

## APPROVED APPLICATION METHODS

Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and until grasses are 3 inches in height. Always add a nonionic surfactant at 0.25% v/v. Addition of Banvel or Permit will improve performance on broadleaf weeds.

## APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	Less than 3% O	rganic Matter	3% or more Org	anic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ACCENT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	ACCENT (ounces)	
Coarse *	1.4	1 /2 to 2/3	1.7	1/2 to 2/3	
Medium	1.7 to 2.3	1/2 to 2/3	2.3	1/2 to 2/3	
Fine	2.3	1/2 to 2/3	2.3 to 3.0	1/2 to 2/3	

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Balance™ PRO

For Use In Field Corn And Silage Corn

Approved Application Systems Ground – Broadcast boom; banded.

Approved Application Method

Preemergence Surface

Balance PRO is not registered in all states. Follow all Restrictions and Precautions on the Balance PRO label including planting depth, environmental precautions, and soil type restrictions.

Follow the Balance PRO Technical Bulletins, 24(c) labels and 2(ee) recommendations for additional use rate restrictions based on soil textures and depth to ground water in various states.

# APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	Less than 3% O	roanic Matter	3% or more Ord	anic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BALANCE PRO (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BALANCE PRO (ounces)	
Coarse*	1.00 to 1.4	1.0 to 1.88	1.25 to 1.7	1.0 to 1.88	
Medium	1.25 to 2.4	1.0 to 2.50	1.75 to 2.4	1.5 to 3.00	
Fine	1.75 to 2.4	1.5 to 2.75	1.75 to 2.4	2.0 to 3.50	

<sup>\*</sup>It is not recommended to use Balance PRO on coarse soils with less than 1.5 percent organic matter

ACETOCHLOR 3.1 + ATZ 2.5 plus Banvel or Clarity

For use on level or flat-planted field corn on soils with more than 2 percent organic matter

Apply in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Preemergence Surface

Corn seeds must be planted 1 - 1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1 - 1/2 inches beneath the soil surface.

For Use on Kochia - Preemergence Surface only – Banvel and Clarity tank mix rates may be reduced to 0.25 to 0.5 pint per acre in soils less than 3% organic matter, or 0.5 pint per acre in soils equal to or greater than 3% organic matter, Follow all label restrictions.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 8 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control, Addition of Accent to this tank mixture will improve control of emerged grasses. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. Postemergence surface applications using sprayable fluid fertilizer as the carrier are not recommended because severe crop injury may occur.

NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

# APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	Less than 3% Orga	anic Matter	3% or more Orga	nic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BANVEL or CLARITY (pints)	ACETOCHLOR 3.1 + ATZ 2.5 + (quarts)	BANVEL or CLARITY (pints)	
Coarse *	1.4	1.0	1.7	1.0	
Medium	1.7 to 2.3	1.0	2.3	1.0	
Fine	2.3	1.0	2.3 to 13.0	1.0	

<sup>\*</sup> On coarse-textured soils containing 2 percent or more organic matter, use ACETOCHLOR 3.1 + ATZ 2.5 plus Banvel only on sandy loam. Do not use on sand and loamy sand with less than 2 percent organic matter.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

# ACETOCHLOR 3.1 + ATZ 2.5 plus Callisto

For Postemergence Surface Applications for Field Corn, Production Seed Corn and Silage Corn

Approved Application Systems
Ground—Broadcast boom; banded

Approved Application Methods

# Postemergence Surface

Callisto is not registered in all states. Follow all Restrictions and Precautions on the Callisto label including planting depth, environmental precautions, and soil type restrictions.

Do not apply to the following soils if ground water depth is 30 feet or less: sands with less than 3 percent organic matter; loamy sands with less than 2 percent organic matter or sandy learns with less than 1 percent organic matter.

#### APPLICATION RATES:

ACETOCHLOR 3.1 + ATZ 2.5 may be tank mixed with 3 ounces of Callisto for postemergence applications. Use the labeled rates of ACETOCHLOR 3.1 + ATZ 2.5 that correspond to the soil texture and organic matter. Broadleaf weeds should not exceed 5 inches in height and corn must be sprayed before it exceeds 11 inches in height. Accent herbicide may be added for postemergence grass control. Follow the label for Accent rates and maximum grass sizes.

Add 2.5% (v/v) spray grade UAN (28%N) or AMS (8.5 lbs/100 gallons spray solution) DO NOT use Methylated Soybean Oil (MSO). DO NOT make post applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

ACETOCHLOR 3.1 + ATZ 2.5 plus Hornet™ WDG

Only Apply This Tank Mixture to Field Corn

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems Ground--Broadcast boom; banded

Approved Application Methods

Preplant Surface, Preplant Incorporated Applied

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe all directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

Preemergence Surface

Apply this tank mixture after planting, before crop and weeds emerge and within 5 days of last preplant tillage operation. Adequate soil moisture is required for optimum herbicidal activity. Precipitation or overhead sprinkler irrigation is required after application to move the herbicide treatment into the weed germination zone.

This tank mixture may be combined with Accent herbicide at 1/3 to 213 ounces per acre to increase control of emerged grasses. Follow all label restrictions and directions.

NOTE: For all soil applications of this tank mixture, corn seeds must be planted 1-112 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter<sup>™</sup> (terbufos) or Thimet<sup>™</sup> (phorate) insecticides are to be applied due to the risk of severe crop injury.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 11 inches in height. Applications made to grasses beyond the 2-leaf stage may not provide satisfactory control. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. Include a non-ionic surfactant at 0.25 percent v/v (1 qt/100 gal) or crop oil concentrate at 1 percent v/v for all postemergence applications. DO NOT make postemergence surface tank mixture applications using sprayable fluid fertilizer as the total carrier because severe crop injury may occur.

NOTE: Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

NOTE: OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE ACETOCHLOR 3.1 + ATZ 2.5 AND HORNET WDG LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

# Application Rates

	BROADCAST RATE PER ACRE				
	Less than 3% C	Organic Matter	3% or more Or	ganic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	Hornet WDG* (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	Hornet WOG (ounces)	
Coarse	1.4	3.0	1.7	3.0	
Medium	1.7 to 2.4	3.0 to 4.0	2.3 to 2.6	3.0 to 4.0	
Fine	2.3 to 2.6	3.0 to 4.0	2.3 to 3.0	3.0 to 4.0	

<sup>\*</sup> Hornet may be substituted for Hornet WDG at 80% of the rates above.

ACETOCHLOR 3.1 + ATZ 2.5 plus Marksman

For use on level or flat-planted field corn on soils with more than 2 percent organic matter.

Apply in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground-Broadcast boom; banded

Approved Application Methods

Preemergence Surface

Corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface. Direct chemical contact with corn seed must be avoided since crop injury may result. Apply far enough behind planter equipment to avoid any incorporation by the planter wheel or other covering device. Do not apply if corn seeds are planted less than 1-1/2 inches beneath the soil surface.

Postemergence Surface

Apply this tank mixture before grasses have reached the 2-leaf stage and the corn is less than 8 inches in height.

NOTE: PREVENT DRIFT TO SOYBEANS OR OTHER DESIRABLE PLANTS. Do not use on furrow irrigated corn, or when corn is planted at the bottom of a furrow, utilizing lister, till or other similar planting methods. DO NOT incorporate after planting or corn emergence. If it is necessary to drag for leveling or rotary hoe to break soil crust, DO NOT disturb the soil more than 1/2 inch deep.

## APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	2% to 3% Ord	anic Matter	3% or more Or	ganic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	MARKSMAN (pints)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	MARKSMAN (pints)	
Coarse*	1.4	2.5 to 3.5	1.7	2.5 to 3.5	
Medium	1.7	2.5 to 3.5	1.7	2.5 to 3.5	
Fine	1.7	2.5 to 3.5	1.7	2.5 to 3.5	

<sup>\*</sup>On coarse-textured soils containing 2 percent or more organic matter, use ACETOCHLOR 3.1 + ATZ 2.5 plus Marksman only on sandy loam. Do not use on sand and loamy sand with less than 2 percent organic matter.

ACETOCHLOR 3.1 + ATZ 2.5 plus Permit

Apply this tank mixture in water after crop emergence.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Postemergence Surface

Apply this tank mixture after corn emergence up to 11 inches in height and before grass weeds reach the 2-leaf stage. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected.

## APPLICATION RATES:

	BROADCAST RATE PER ACRE"				
	Less than 3% Org	anic Matter	3% or more Organ	nic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PERMIT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PERMIT (ounces)	
Coarse	1.4	0.67	1.7	0.67	
Medium	1.7 to 2.3	0.67	2.3	0.67	
Fine	2.3	0.67	2.3 to 3.0	0.67	

<sup>\*</sup>In areas of heavy weed infestation use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Prowl

Apply this tank mixture in water or sprayable fluid fertilizer solutions.

Approved Application Systems Ground—Broadcast boom; banded Dry Bulk Fertilizer Impregnation

Approved Application Methods

Preemergence Surface

DO NOT preplant incorporate this tank mixture as serious crop injury can result.

# APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	2% to 3% Organ	nic Matter	3% or more Orga	nic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PROWL* (quarts)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PROWL* (quarts)	
Coarse	1.4	0.8	1.7	0.8 to 1.0	
Medium	1.7 to 2.3	0.8 to 1.0	2.3	1.0	
Fine	2.3	1.0	2.3 to 3.0	1.0	

<sup>\*</sup> Use rates listed in this label using Prowl. Use equivalent rates when using Prowl 3.3 EC formulation. One

quart of Prowl equals 1.2 quarts of Prowl 3.3 EC. Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Pursuit

Apply this tank mixture either before or after crop emergence. Refer to the Pursuit herbicide label for specific weeds controlled postemergence.

Approved Application Systems Ground—Broadcast boom; banded

Approved Application Methods

Preplant Incorporated: Preemergence Surface

Postemergence Surface

Apply this tank mixture before weeds reach 3 inches in height and the corn is no more than 11 inches in height. Some leaf burn to corn may occur occasionally but subsequent growth or yield should not be affected. DO NOT make postemergence surface applications using sprayable fluid fertilizer as the carrier because severe crop injury may occur.

NOTE: THIS TANK MIXTURE IS FOR USE ONLY ON SELECTED FIELD CORN HYBRIDS (MI-CORN) WARRANTED BY THE SEED COMPANY TO POSSESS RESISTANCE/TOLERANCE TO DIRECT APPLICATION OF PURSUIT (FOR EXAMPLE: PIONEER IR HYBRIDS), DO NOT APPLY PURSUIT TO CORN HYBRIDS WHICH LACK GENETIC RESISTANCE/TOLERANCE TO PURSUIT HERBICIDE. OBSERVE ALL PRECAUTIONS AND LIMITATIONS ON THE ACETOCHLOR 3.1 + ATZ 2.5 AND PURSUIT LABELS BEFORE USE OF THIS TANK MIXTURE INCLUDING PRECAUTIONS ON MINIMUM RECROPPING INTERVAL AND ROTATIONAL GUIDELINES.

## APPLICATION RATES:

	BROADCAST RATE PER ACRE				
	Less than 3% Orga	anic Matter	3% or more Organ	nic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PURSUIT (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PURSUIT (ounces)	
Coarse	1.4	4	1.7	4	
Medium	1.7 to 2.3	4	2.3	4	
Fine	2.3	4	2.3 to 3.0	4	

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

ACETOCHLOR 3.1 + ATZ 2.5 plus Python™ WDG

Only Apply This Tank Mixture to Field Corn

Apply in water or sprayable fluid fertilizer solutions for control of the annual grasses and broadleaf weeds listed in the "WEEDS CONTROLLED" section of this label.

Approved Application Systems Ground--Broadcast boom; banded

Approved Application Methods

Preplant Surface Applied

For minimum-tillage or no tillage systems this tank mix may be applied up to 30 days before planting. If weeds are present at the time of treatment, apply in a tank mixture combination with an appropriate contact herbicide. Observe directions for use, precautions and restrictions on the label of the contact herbicide. During the planting operation, be careful not to move untreated soil to the surface or move treated soil out of the row, as weed control may be reduced.

# Preemergence Surface

NOTE: For all soil applications of this tank mixture, corn seeds must be planted 1-1/2 inches or deeper beneath the soil surface.

DO NOT use this tank mixture when Counter (terbufos) or Thimet (phorate) insecticides are to be applied due to the risk of severe crop injury.

NOTE: Avoid all direct or indirect contact with nontarget plants. Spray drift of this tank mixture to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.

NOTE: OBSERVE ALL PRECAUTIONS AND LIMITATIONS OF THE ACETOCHLOR 3.1 + ATZ 2.5 AND PYTHON LABELS BEFORE USE OF THIS TANK MIXTURE, INCLUDING PRECAUTIONS ON SOIL RESTRICTIONS, SOIL INSECTICIDES, ROTATIONAL RESTRICTIONS, AND SPRAYER CLEANUP.

## Application Rates

	BROADCAST RATE PER ACRE				
	Less than 3% (	Organic Matter	3% or more Or	ganic Matter	
SOIL TEXTURE	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PYTHON WDG* (ounces)	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PYTHON WDG (ounces)	
Coarse	1.4	0.80	1,7	0.89	
Medium	1.7	0.89	2.3 to 2.6	1, 0	
Fine	2.3 to 2.6	0.89	2.3 to 3.0	1.0	

<sup>\*</sup> In areas of heavy weed infestation use up to 4.3 quarts per acre on medium- and fine-textured soils.

<sup>\*\*</sup> Refer to the "USE RESTRICTIONS" and "GENERAL INFORMATION" sections of this label and Python WDG for restrictions

ACETOCHLOR 3.1 + ATZ 2.5 plus Princep

For additional preemergence control of heavy weed infestations and/or hard-to-control weeds listed in the "WEEDS CONTROLLED" section of this label, refer to the following rate table to determine the recommended rates for this tank mixture on various soil types.

	BROADCAST	RATES PER ACRE
SOIL TEXTURAL GROUP	ACETOCHLOR 3.1 + ATZ 2.5 (quarts)	PRINCEP 4L" (quarts)
Coarse	1.7	0.8 to 1.0
Medium	2.3	1.0 to 1.5
Fine	2.3 to 3.0	1.0 to 1.5

\* Use rates listed in this label using Princep 4L. Use equivalent rates when using the Princep Caliber 90 formulation. One quart of Princep 4L equals 1.1 pounds of Princep Caliber 90. Use the higher rates in the recommended ranges in areas of heavy weed infestation.

NOTE: In areas of heavy weed infestations use up to 2.3 quarts of this product per acre on coarse-textured soils and 2.3 to 3.0 quarts of this product per acre on medium- and fine-textured soils. Do not exceed 2.5 quarts of ACETOCHLOR 3.1 + ATZ 2.5 per acre on highly erodible soils with less than 30 percent plant residue cover.

NOTE: LAND TREATED WITH PRINCEP SHOULD NOT BE PLANTED TO ANY CROP EXCEPT FOR CORN FOR ONE YEAR FOLLOWING TREATMENT AS CROP INJURY MAY OCCUR. AFTER HARVEST OF TREATED CROP, PLOW AND THOROUGHLY TILL THE SOIL IN THE FALL OR SPRING TO MINIMIZE POSSIBLE INJURY TO SPRING SEEDED ROTATIONAL CROPS.

# LIMIT OF WARRANTY AND LIABILITY

This Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes set forth in the Complete Directions for Use label booklet ("Directions") when used in accordance with those Directions under the conditions described therein. NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

Buyer and all users are responsible for all loss or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, application in any manner not explicitly set forth in the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company's stewardship requirements and with express written permission from this Company.

THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN

CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES,

Buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement.

Harness, Roundup, Roundup Ready and Roundup WeatherMAX are trademarks of Monsanto Technology LLC.

Permit is a registered trademark of, and used under license from, Nissan Chemical Industries, Ltd. All other trademarks are the property of their respective owners.

\*Pages 150-151 Confidential Statement of Formula may be entitled to confidential treatment\*

# CREMICAL NAME/PESTICIDE CHEMICAL CODE (PCC) REQUEST FORM

CH+05-0358

RECUESTOF NAME Shyam P TELL 308-9374 ORG TR	Material REQUEST DATE 8 125 03		
CSF ATTACHED:	A /BR )		
YES If CSF is attached complete Item	A and the chemical name in Item B		
DNO If CSF is not attached complete I	tems A through C		
C 1407 II Car is not attached complete i	Total F. Haviga S.		
A. INFORMATION REQUIRED:			
*Obeck Applicable Category	4		
yo Provide PCC and Tolerance Exemption St	ams For Food-Use Inert Ingredient(s)		
Provide PCC for Non-Food Use Inert Ingre			
☐ Provide PCC for Active Ingredient(s)			
D Provide PCC for Dye			
Determine if Fragrance is Acceptable for U	lse in Formulation		
- Clie Transitus).			
B. INGREDIENT INFORMATION:			
Ingredient Ne. 1:	Ingredient No. 2:		
Chem. Name: Chem. Name:			
T-d-birms	Trade Name:		
Trade Name CAS Reg. No.:	CAS Reg. No.:		
Constant Swg. 1990.			
Ingredient No. 3:	Ingredient No. 4:		
Chem. Name:	Chem. Name:		
CIETA NAIDE.			
Trade Name:	Trade Name:		
CAS Reg. No.:	CAS Reg No.:		
C APPENDED BRODECT BRODEN TYOU			
C. PESTICIDE PRODUCT INFORMATION:			
EPA Reg No./File Symbol: 427 SO - R N E.Prox	duct Name: Acoto chiler 3.1+ATZ 2.5		
Registrani: Albourge nie	Food-Use Pesticide; X YES LI NO		
Precent in Formulation (For Fragrance/Dyes only): _			
INFORMATION REPORTED:			
Ingradient No. 1	Ingredient No. 2:		
rngrading to	PCC:		
TOL. STATUS: 40 CFR 180 - 920	TOL. STATUS		
THER INF.:	OTHER INF.:		
ngredient No. 3:	Ingredient No. 4:		
CC:	PCC:		
OL STATUS. THER DVI:	TOJ. STATUS		
	Date Completed: 08/25/2005		
LINDA PAN	Date Completed: 08/25/2005		

Ci.+ a5-0359

TELL 1200 0274 (BG)	MATHUM REQUEST DATE 9/6 ( TRB/PD ROOM 268 MAIL CODE 7/7
	(DN/9E)
CSF ATTACHED:	
	Item A and the chemical name in Item B
NO If CSF is not attached comp	olete Items A through C.
A. INFORMATION REQUIRED:	
V Chica Applicatore Category	
Provide PCC and Tolerance Exempti	ion Status For Food-Use Inert Ingredient(s)
Derovide PCC for Non-Food Use Inen	
Provide PCC for Active Ingredient(s)	
□ Provide PCC for Dye	
· ·	For Line in Termulation
☐ Determine if Fragrance is Acceptable ☐ Other (Describe):	
B. INGREDIENT INFORMATION:	
Ingredient No. 1;	Ingredient Na. 2:
ing continue in	
Chem. Name:	Ciem Name:
Trade Name:	Trade Name:
CAS Reg. No.:	CAS Reg. No.:
Ingredient No. 3:	Ingredient No. 4:
Chem. Name:	
Trade Name:	Trade Name:
CAS Reg. No.:	CAS Reg. No.:
C. PESTICIDE PRODUCT INFORMATIO	N:
EPA Reg. No. File Symbol 42750 - RNI	Product Name: Acetochor 3.1+ AT2.205
Registrant El Promaco P. 100	Food-Use Pesticide: X YES □ NO
Precent in Formulation (For Fragrance/Dyes on	ly):%
NFORMATION REPORTED:	
on Onto Fig. 100 VIII DE	
ngredient No. 1:	Ingredient No. 2:
CC	PCC: TOL STATUS
OL STATUS 40 CFR 180.920	TOL STATUS
THER INF.:	OTHER INF.:
gredient No. 3:	Ingredient No. 4:
ic.	PCC: TOLETATUS
The same of the sa	TOL STATUS
N. STATUS: HER DVF:	OTHER DIF: 09/06/05

\*Pages 154-155 Confidential Statement of Formula may be entitled to confidential treatment\*